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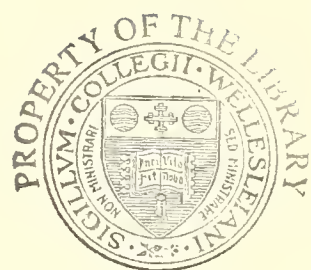
U.S. Naval Observatory, Washington, D. C. 20392

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List of Active Professional Observatories

by

M. R. Lukac and R. J. Miller



Introduction

Since the first volume of the *American Ephemeris and Nautical Almanac* for 1855, published jointly by the U.S. Naval Observatory (Washington, D.C.) and the Royal Greenwich Observatory (United Kingdom), there has been a section providing positions of ‘principal’ observatories. Over the years various refinements of the data and formatting changes have occurred. In 1981 the *American Ephemeris and Nautical Almanac* changed its name to *The Astronomical Almanac*. Currently, observatories are listed in Section J of *The Astronomical Almanac*.

For many years the U.S. Naval Observatory’s Nautical Almanac Office computed and distributed lunar occultation predictions for observers worldwide. During the course of this project several mailings were made to all observatories listed in *The Astronomical Almanac*, requesting information on current astronomical programs and a list of instruments with associated coordinates. Information was also gathered about the coordinates and relocations of telescopes at various other observatories, both professional and amateur. Some historical data pertaining to the individual observatories were gathered as well. A database was created with information from older correspondence already on file, the correspondence generated by the mailings, and separate correspondence received from the occultation project.

Although the occultation project was discontinued at the U.S. Naval Observatory in 1991, the observatory database continued to be updated from other source material. Most of the information for corrections or additions to *The Astronomical Almanac* observatory list has come from the American Astronomical Society (AAS) directories, André Heck’s (University of Strasbourg) directories of astronomical institutions, observatory pamphlets, worldwide web sites, correspondence, and other source materials from the U.S. Naval Observatory Library (see Bibliography). Due to the vast amount of information compiled over the years for this publication, it is not feasible to acknowledge individual contributors.

Since coordinates of telescopes are necessary for the reduction of astronomical observations, and any changes in the location of telescopes are of interest to the astronomical historian, this Circular lists telescopes (and some other instruments) with their coordinates and associated dates of operation, if available. This is a “first draft” for creating a list of currently active professional observatories with their complete list of instruments, past and present. It is hoped and encouraged that readers will provide corrections where needed, as well as any additional information to make the list more complete.

M. R. Lukac is responsible for organizing and maintaining the database. R. J. Miller edited the introduction and index sections for this Circular.

Format of Observatory Listing

The following is a description of the information in each column below the observatory name and address:

- | | |
|----------|---|
| Column 1 | Aperture of instrument – abbreviations used are B for baseline, D for diameter, H for height, L for length, and R for radius |
| Column 2 | Description of instrument – an instrument may be listed more than once if it has been moved to another location within the observatory boundaries |
| Column 3 | Longitude in degrees, minutes, and seconds of arc (East longitudes are positive) |

Column 4 Latitude in degrees, minutes, and seconds of arc (North latitudes are positive)

Column 5 Mean sea level height *in meters*

Column 6 Type of coordinates:

A = Astronomical

D1 = Doppler determined – WGS 72 datum

G = Geodetic – datum unknown

AL = Australian datum

AD = Adindân datum

CA = Corregio Alegre (Brazil) datum

CI = Campo Inchauspe (Argentina) datum

CP = Cape (South Africa) datum

E1 = European 1979 datum

EU = European datum

G1 = GRS 80 datum

G2 = WGS 84 datum

G3 = Ordnance Survey of Great Britain (SN) 1980 datum

GB = Ordnance Survey of Great Britain (1936) datum

HS = Hermannskogel datum

IN = Indian datum

LC = La Canoa (Venezuela) datum

NA = North American (1927) datum

NZ = New Zealand datum

OH = Old Hawaiian datum

PD = Potsdam datum

PR = Puerto Rican (1940) datum

SA = South American datum

TO = Tokyo datum

S = Satellite determined – datum unknown

S1 = Aerial survey – North American (1983) datum

U = Unknown

Column 7 Instrument information – dates of operation and other information pertaining to the specified instrument at the coordinates indicated (if available). Some examples are:

Former	No longer at specified coordinates (if given) or at observatory.
Inactive	Still at specified coordinates (if given) or observatory, but rarely or never used.
O = 78-mm	Objective = 78-mm
1941+	Began operation in 1941 and is currently operational.
1939-?	Began operation in 1939 and ceased operation (date unknown).
?-c.1980	Date of beginning operation unknown and ceased operation about (circa) 1980.
1835-1838; museum	Operational from 1835 to 1838, then transferred to a museum.

1986+; Mongolia	Began operation in 1986 and is currently operational; located at a site in Mongolia.
10/1962-11/1988	Operational from October 1962 to November 1988.
1861-1972; to Perth Obs.	Operational from 1861 to 1972, then transferred to Perth Observatory.
1961+; from Perkins Obs.	In operation since 1961; instrument was transferred to the specified site from Perkins Observatory.

Special Mention In Reference To The Bibliography

A few special publications should be acknowledged which have been extremely helpful in gathering source data for this Circular. The 2-volume set of *StarGuides* (and its preceding editions) by André Heck of the Astronomical Observatory in Strasbourg, France, was used extensively for address information. If one is working with observatories in general, this set should definitely be on the shelf for reference. Another publication which provided invaluable help with information through its various and timely articles is the monthly magazine *Sky and Telescope*. Several of the editions of the "List of Radio and Radar Astronomy Observatories," from the National Academy of Sciences, Washington, D.C., provided basic coordinate and instrument information for many of the radio observatories. "The Greenwich List of Observatories" by Derek Howse, published in the *Journal of the History of Astronomy* (November 1986), was used to add information about many of the earlier instruments at observatories which are of historical significance. This list should also be on one's reference shelf.

Bibliography

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ALGERIA

Alger Observatory, University of Alger, Route de l'Observatoire, Boîte Postale 63, Bouzaréa, 16340 Alger, Algeria
 OPL-8 Danjon astrolabe +3 02 06.9 +36 48 07 345 U
 19-cm Gautier meridian instrument +3 02 07.9 +36 48 04.8 345 U
 31.8-cm Coudé equatorial reflector +3 02 03 +36 47 54 342 EU
 19-cm reflector +3 02 03 +36 47 54 345 EU
 75-mm refractor +3 02 03 +36 47 54 345 EU
 32-mm refractor +3 02 03 +36 47 54 345 EU
 65-mm Secrétan meridian circle
 25-cm coelostat
 33-cm Gautier equatorial photographic reflector
 50-cm Foucault equatorial reflector

ARGENTINA

Argentine Radio Astronomy Institute, Casilla de Correo 5, 1894 Villa Elisa (BA), Argentina -58 08 14 -34 52 08 11 G
 30-m parabolic radio telescope
 30-m radio telescope on rails
Bosque Alegre Astrophysical Station, Córdoba Astronomical Observatory, Laprida 854, 5000 Córdoba, Argentina
 1.52-m Warner & Swasey/Fecker reflector -64 32 48 -31 35 53 1250 A 12/1941+; from Córdoba Obs.
 cometseeker -64 32 48 -31 35 53 1250 A

Córdoba Astronomical Observatory, National University of Córdoba, Laprida 854, 5000 Córdoba, Argentina
 19-cm Repsold meridian circle -64 11 47.4 -31 25 16.4 434 A Former; to Félix Aguilar Obs.
 20-cm Clark equatorial refractor -64 11 52.47 -31 25 13.8 442 G
 32-cm Gautier-Henry equatorial astrophograph -64 11 54.0 -31 25 13.8 442 G
 25-cm reflector -64 11 54.0 -31 25 13.8 442 G
 30-cm Clark equatorial refractor -64 11 52 -31 25 13.8 442 G
 13-cm altazimuth telescope -64 11 52 -31 25 13.8 442 G
 12.5-cm Brashear-Armillaire equat. photographic tel.
 1.52-m Warner & Swasey/Fecker reflector

Dr. Carlos U. Cesco Station, Yale-San Juan Universities, 5405-Barreal, Calingasta, Argentina
 50/50-cm twin astrograph -69 19 45.03 -31 48 08.2 2348 A 1965+; San Juan Univ. telescope
 18-cm transit circle -69 19 54.0 -31 48 10.0 2296 A 1967-07/1973; to U.S. Naval Obs., Washington, DC
 76-cm Perrine Cassegrain reflector 1978+; Córdoba Obs. telescope

El Leoncito Astronomical Complex, Avenida España 1512 Sur, Casilla de Correo 467, 5400 San Juan, Argentina
 2.15-m Boller & Chivens reflector -69 18 00 -31 47 57 2552 U 02/1986+
 1-m reflector San Juan Univ. telescope
 1.5-m telescope

Félix Aguilar Observatory, National University of San Juan, Avenida Benavidez 8175 Oeste, Chimbass, 5413 San Juan, Argentina
 Danjon astrolabe
 19-cm Repsold meridian circle
 17.5-cm Steinheil refractor
 transit instrument

La Plata Astronomical Observatory, National University of La Plata, Paseo del Bosque s/n, 1900 La Plata (BA), Argentina
 19-cm Repsold meridian circle
 34-cm Carte du Ciel astrophotograph
 20-cm equatorial cometseeker
 43.3-cm Gautier refractor
 11-cm altazimuth telescope
 80-cm Cassegrain reflector
 Danjon astrolabe

National Observatory of Cosmic Physics, Institute of Science and Technology, Avenida Mitre 3100, 1663 San Miguel (BA), Argentina
 30-cm spectroheliograph
 12.5-cm Secchi telescope
 18-cm Zeiss equatorial refractor
 15/11-cm Heyde-Zeiss equatorial refractor

Naval Observatory, Avenida España 2099, 1107 Buenos Aires, Argentina
 transit instrument
 Askania AP-70 visual transit instrument
 photographic zenith tube

ARMENIA

Byurakan Astrophysical Observatory, 378433 Byurakan, Armenia
 48-cm Schmidt camera
 1.00/1.32-m Schmidt reflector
 2.64-m Cassegrain/Coudé equatorial reflector
 40-cm Maksutov reflector
 20-cm Schmidt camera
 25-cm telescope
 12.7-cm double astrophotograph
 15-cm Zeiss double astrophotograph
 53-cm Schmidt reflector
 50-cm Cassegrain reflector
 40-cm Cassegrain reflector
 interferometer
 10-m paraboloid
 fixed cylindrical paraboloid (4)

AUSTRALIA

Anglo-Australian Observatory, Australian National University, Siding Spring Mountain, Private Bag, Coonabarabran, NSW 2357, Australia

61-cm reflector	+149 03 39.8	-31 16 25.4	1149	AL Mt. Stromlo Obs. telescope
3.89-m Anglo-Australian Grubb-Parsons equat. reflector	+149 03 57.90	-31 16 37.3	1164	AL 06/1975+
1.02-m equatorial reflector	+149 03 39.4	-31 16 22.0	1150	AL Mt. Stromlo Obs. telescope
41-cm reflector	+149 03 37.8	-31 16 23.9	1157	AL Mt. Stromlo Obs. telescope
20-cm Schmidt camera	+149 03 37.8	-31 16 23.9	1157	AL Mounted on 41-cm reflector
1.24/1.83-m UK Grubb-Parsons Schmidt telescope	+149 04 12.8	-31 16 27.8	1145	AL 07/1973+

Australian National Radio Astronomy Observatory, CSIRO/Division of Radiophysics, P.O. Box 276, Parkes, NSW 2870, Australia

64-m LBA steerable parabolic dish antenna	+148 15 44.15	-33 00 00.0	392	AL 1961+; used with 18.3-m antenna as an interferometer
18.3-m steerable paraboloid	+148 15 44.36	-32 59 59.9	392	AL Used with 64-m antenna as an interferometer
11-m radio dish				Inactive
5.8-m radio dish				Inactive

Australia Telescope National Facility, CSIRO, P.O. Box 94, Narrabri, NSW 2390, Australia

D=3-km circular radioheliograph radiospectrograph	+149 33 39.5	-30 18 55.7	217	AL 1967-?; former
1.7-cm USNGS BC-4 camera	+149 33 39.5	-30 18 55.7	217	AL
USN Doppler mobile van system	+149 33 36.89	-30 18 39.4	211	AL Former; Natl. Geodetic Survey instrument
7.62-m parabolic reflector #1	+149 33 36.72	-30 18 39.6	215	AL Former; U.S. Navy instruments
7.62-m parabolic reflector #2				Former
L=6-km Compact Array (CA)	+149 32 56.33	-30 18 52.0	208	AL Six 22-m antennas
22-m LBA radio antenna	+149 05 59	-31 16 04	840	AL Mopra Obs., Coonabarabran

Deep Space Station-Tidbinbilla, CDSCC, P.O. Box 4350, Kingston, ACT 2604, Australia

26-m parabolic equatorial Cassegrain antenna	+148 58 48.20	-35 24 08.0	656	AL 1965-1986; upgraded to 34-m
64-m parabolic antenna	+148 58 48.20	-35 24 14.3	670	AL 1972-1989; upgraded to 70-m
70-m parabolic Cassegrain antenna	+148 58 48.19	-35 24 14.3	670	AL 1989+; upgraded from 64-m
34-m parabolic equatorial Cassegrain antenna	+148 58 35.32	-35 24 00.2	672	AL 1986+
34-m parabolic equatorial Cassegrain antenna	+148 58 48.21	-35 24 08.0	664	AL 1986+; upgraded from 26-m

Fleurs Radio Observatory, University of Sydney, Sydney, NSW 2006, Australia

rotational synthesis array	+150 46 30	-33 51 45	45	U
110x16.4-m rectangular filled-in array				
7.5x12-m rectangular filled-in array				
5x8-m rectangular filled-in array				
3.1x5.2-m rectangular filled-in array				
1.8x2.8-m rectangular filled-in array				
2-rhombic interferometer				
cross-type radio telescope				
6-m steerable paraboloid				
32-element cross-type radio telescope				32 9-m paraboloids
crossed compound interferometer				32 9-m and two 14-m paraboloids

Molonglo Radio Observatory, University of Sydney, R.M.B. 107, Hoskinstown, NSW 2621, Australia
 1609-m cross-type radio telescope +149 25 25.25 -35 22 19.0 732 U Each arm is 1600x12-m

Mount Pleasant Radio Astronomy Observatory, University of Tasmania, G.P.O. Box 252C, Hobart, Tasmania 7001, Australia
 26-m steerable parabolic antenna +147 26 21 -42 48 18 43 U 05/1986+
 13.5-m steerable altazimuth parabolic antenna 1988+

Mount Stromlo Observatory, Australian National University, Private Bag, Weston Creek P.O., Weston Creek, ACT 2611, Australia
 1.88-m Grubb-Parsons reflector +149 00 27.59 -35 19 14.3 767 AL 1955+
 75-cm Reynolds reflector +149 00 18.44 -35 19 20.4 772 AL 1925+
 1.22-m Grubb Schmidt/Cassegrain reflector +149 00 22.43 -35 19 19.0 767 AL 1944+; from Melbourne Obs.
 25-cm Grubb-Parsons photographic zenith tube +149 00 19.01 -35 19 20.9 ---- AL 1955+
 23-cm Oddie Grubb refractor +149 00 33.45 -35 19 03.8 780 AL 1911-1913
 51-cm Schmidt reflector Uppsala Univ. Obs. telescope
 15-cm Farnham Grubb refractor 01/1956+
 66-cm McDowell Yale-Columbia photo. refractor 1927+
 30-cm Grubb-Parsons solar tower telescope 06/1954-?; to Munich Obs.
 19-cm Askania verticle circle
 76-mm transit telescope
 50-cm reflector

Perth Observatory, Walnut Road, Bickley, WA 6076, Australia
 33-cm Grubb equatorial astrogaph +116 08 06.07 -32 00 32.3 391 AL 1966+
 61-cm Boller & Chivens Cassegrain reflector +116 08 06.07 -32 00 29.1 407 AL 04/1971+
 40.6-cm Cassegrain/Newtonian reflector +116 08 02.33 -32 00 32.1 384 AL 1970+; Western Austl. Univ. telescope
 19-cm Repsold meridian circle +116 08 04.52 -32 00 29.9 388 AL 11/1967+; Hamburg Obs. telescope
 36-cm Celestron Schmidt/Cassegrain reflector +116 08 06.61 -32 00 30.7 389 AL 1980+
 25-cm Grubb refractor +115 50 34.50 -31 57 15.3 65 G
 27-cm refractor +116 08 06.15 -32 00 32.2 391 G
 15-cm Troughton & Simms transit circle

Riverview College Observatory, St. Ignatius College, Lane Cove, NSW 2066, Australia
 18-cm equatorial refractor +151 09 30 -33 49 45.7 25 AL
 10-cm refractor +151 09 29.8 -33 49 45.7 24 AL Former
 12.7-cm cometseeker +151 09 29.8 -33 49 45.7 24 AL
 6-cm astrotriple equatorial telescope Former

Siding Spring Observatory, Australian National University, Private Bag, Coonabarabran, NSW 2357, Australia
 2.3-m Advanced Technology Telescope (ATT) +149 03 42 -31 16 24 1149 U 1984+

AUSTRIA

Kanzelhöhe Solar Observatory, Karl Franzens University-Graz, A-9521 Treffen, Austria
 11-cm solar patrol instrument +13 54 22 +46 40 40 1526 G
 13-cm photoheliograph

Kuffner Observatory, Johann Staud Strasse 10, A-1160 Vienna, Austria

27-cm Steinheil refractor	+16 17 46.82	+48 12 47.8	302	G
15-cm refractor	+16 17 48.15	+48 12 47.3	299	G
12.5-cm meridian circle	+16 17 44.4	+48 12 46.7	293	A Inactive
25-cm refractor	+16 17 25	+48 12 51	302	EU
13-cm refractor	+16 17 47.8	+48 10 14.8	233	U
16.5-cm refractor	+16 17 48.2	+48 12 47.3	299	EU

L. Figl Astrophysical Observatory, Vienna University, Türkenschanzstrasse 17, A-1180 Vienna, Austria

1.52-m Ritchey-Chrétien reflector	+15 55 25	+48 05 02.3	890	HS 1969+
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Lustbühel Observatory, Karl Franzens University-Graz, Lustbühelstrasse 46, A-8042 Graz, Austria

40-cm reflector	+15 29 41.75	+47 03 56.3	480	A c.1972+
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University of Graz Observatory, Karl Franzens University-Graz, Institute for Astronomy, Universitätsplatz 5, A-8010 Graz, Austria

16-cm Steinheil refractor	+15 27 03	+47 04 43	375	HS 1890+
7-cm transit instrument				?-c.1980; put into storage

Urania Observatory, Uraniastrasse 1, A-1010 Vienna, Austria

26-cm Cassegrain reflector	+16 23 07.29	+48 12 43.4	193	G
5-cm transit instrument	+16 23 07.54	+48 12 43.3	186	G
26-cm refractor	+16 23 01	+48 12 47	181	EU
8-cm Zeiss cometseeker	+16 23 22.2	+48 12 43.5	185	U
68-mm Busch telescope	+16 23 22.2	+48 12 43.5	185	U
65-mm Fraunhofer telescope	+16 23 22.2	+48 12 43.5	185	U
68-mm Fritsch telescope	+16 23 22.2	+48 12 43.5	185	U
38-mm Ramsden telescope	+16 23 22.2	+48 12 43.5	185	U
5-cm Busch telescope	+16 23 22.2	+48 12 43.5	185	U
6-cm Nickel refractor	+16 23 01	+48 12 47	181	EU
6-cm cometseeker #1	+16 23 22.2	+48 12 43.5	185	U
6-cm cometseeker #2	+16 23 22.2	+48 12 43.5	185	U
20-cm Zeiss refractor	+16 23 22.2	+48 12 43.5	185	U
10-cm Zeiss telescope	+16 23 22.2	+48 12 43.5	185	U
43-mm Fraunhofer telescope	+16 23 22.2	+48 12 43.5	185	U
8-cm apochromatic telescope	+16 23 22.2	+48 12 43.5	185	U
15-cm refractor	+16 23 07	+48 12 43	193	EU
30-cm reflector	+16 23 07	+48 12 43	193	EU

Vienna University Observatory, Vienna University, Türkenschanzstrasse 17, A-1180 Vienna, Austria

7-cm Askania transit instrument	+16 20 14.04	+48 13 54.3	241	A
67-cm Grubb equatorial refractor	+16 20 20.88	+48 13 55.5	265	G 1880+
33-cm astrograph	+16 20 14.1	+48 13 54.3	241	A
25-cm astrograph	+16 20 13.3	+48 13 56.8	240	U
15-cm Merz equatorial cometseeker	+16 20 14.1	+48 13 54.3	241	A
6-cm cometseeker	+16 20 14.1	+48 13 54.3	241	A
24-cm refractor	+16 20 14.1	+48 13 54.3	241	A
30-cm Clark refractor	+16 20 19	+48 13 55.4	252	U
45-mm Plossl telescope	+16 21 30	+48 13 42	252	U

13.5-cm zenith telescope
 21-cm refractor
 40-cm Cassegrain telescope
 15-cm Fraunhofer equatorial telescope
 15-cm Steinheil equatorial telescope
 10-cm refractor #1
 10-cm refractor #2
 76-mm Fraunhofer equatorial telescope
 76-mm Dollond equatorial telescope
 12.7-cm Plössl equatorial dialytic telescope
 76-mm Plössl cometseeker

BELGIUM

Astronomical and Astrophysical Institute, Open University of Brussels, Case Postale 165, Avenue F.D. Roosevelt 50, B-1050 Brussels, Belgium
 16-cm refractor +4 22 59.13 +50 48 45.6 147 EU
 34-cm reflector +4 22 59.13 +50 48 45.6 147 EU
 12-cm astrograph +4 22 59.13 +50 48 45.6 147 EU Inactive
 16-cm astrograph +4 22 59.13 +50 48 45.6 147 EU Inactive
 10.2-cm solar spectrograph +4 22 59.1 +50 48 44.9 144 G Former

Cointe Observatory, Liège University, Institute of Astrophysics, Avenue de Cointe 5, B-4000 Liège-Cointe, Belgium
 43/60-cm Schmidt telescope +5 33 51.6 +50 37 06 127 A 1957+
 30-cm coelostat Used for education purposes

Humain Radio Astronomy Station, Royal Observatory of Belgium, B-5400 Marche, Belgium
 7.5-m Würzburg radio telescope +5 15 19 +50 11 31 293 A 1956+
 multi-antenna interferometer +5 15 19 +50 11 31 293 A 1972+; 48 4-m antennas
 S.E.A. loop antenna 1959+

Royal Observatory of Belgium, Avenue Circulaire 3, Uccle, B-1180 Brussels, Belgium
 19-cm Askania meridian circle +4 21 29.21 +50 47 54.7 105 A
 6-cm Danjon astrolabe +4 21 29.19 +50 47 53.9 107 A
 45-cm Cooke-Zeiss equatorial visual refractor +4 21 37.16 +50 47 56.0 109 EU
 Doppler satellite tracking station +4 21 31.11 +50 47 54.9 150 G
 38-cm Merz-Cooke refractor +4 21 36.96 +50 47 56.0 111 EU
 30-cm Zeiss triplet +4 21 39.26 +50 47 58.4 107 EU
 25-cm refractor +4 21 36.16 +50 47 54.2 111 EU
 10-cm refractor +4 21 33.16 +50 47 54.0 107 EU
 15-cm Cooke refractor +4 21 35.46 +50 47 56.0 111 EU
 20-cm Zeiss double astrograph +4 21 32.26 +50 47 55.6 107 EU
 40-cm Zeiss double astrograph
 16-cm Steinheil-Cooke telescope
 0.84/1.20-m Cox-Hargreaves-Thomson Schmidt telescope +4 21 +50 48 105 U 1958+
 40/60-cm catadioptric telescope
 16-cm Grubb visual refractor
 13-cm Zeiss heliograph

9-cm transit instrument
7-cm transit instrument
1.02-m Zeiss telescope
Repsold meridian circle

?-1940; destroyed
Former; damaged

BRAZIL

Abrahão de Moraes Obs., Univ. of São Paulo, Ast. and Geophysical Inst., Ave. Miguel Stéfano 4200, Agua Funda, C.P. 9638, 01.065 São Paulo (SP), Brazil
19-cm Zeiss AM-190 meridian circle -46 58 01 -23 00 06 850 A
OPL-33 Danjon impersonal astrolabe -46 58 03 -23 00 06 849 A
60-cm Boller & Chivens reflector -46 58 03 -23 00 04 849 A 1982+
2-m radio telescope

Antares Astronomical Observatory, Feira de Santana State University, Caixa Postal 102, 44.100 Feira de Santana (BA), Brazil
15-cm refractor -38 57 53 -12 15 25 256 U
15-cm reflector
20.3-cm Dinamax reflector
solar photographic telescope
Zeiss meniscus Cassegrain reflector
Zeiss camera
double laser telescope

Itapetinga Radio Observatory, Mackenzie University, INPE/CRAAM, Caixa Postal 200, 12.940 Atibaia (SP), Brazil
13.7-m mm-wavelength radio telescope -46 33 27.81 -23 11 04.7 806 G 12/1971+
1.5-m equatorial radio telescope
radio polarimeter

Morro Santana Obs., Fed. Univ. Rio Grande do Sul, Physics Inst., Campus do Vale, C.P. 15051, Ave. Bento Gonçalves 9500, 91.500 Porto Alegre (RS), Brazil
52-cm Zeiss Cassegrain reflector -51 07 36 -30 03 12 300 G

National Observatory, Rua General José Cristino 77, 20.921 Rio de Janeiro, Brazil
11-cm Heyde visual zenith tube -43 13 21.93 -22 53 42.2 33 A
46-cm Cooke equatorial refractor -43 13 26.5 -22 53 43.9 38 G
32-cm Cooke equatorial refractor -43 13 25.5 -22 53 44.1 38 G
20-cm Heyde equatorial refractor -43 13 24.7 -22 53 43.6 38 G
3-cm Heyde theodolite -43 13 26.2 -22 53 43.9 38 G
11-cm photoheliograph
8-cm meridian telescope
7-cm meridian telescope

Pico dos Dias Observatory, National Laboratory for Astrophysics, Rua Coronel Rennó 7, Caixa Postal 21, 37.500 Itajubá (MG), Brazil
1.6-m Boller & Chivens Ritchey-Chrétien/Coudé reflector -45 34 57.6 -22 32 04.0 1870 G 1980+
60-cm Zeiss-Jena Cassegrain reflector -45 34 58.6 -22 32 04.8 1865 G 1983+
30-cm comet camera -45 34 58.1 -22 32 05.0 1863 G 1989+

Piedade Observatory, Federal University of Minas Gerais, Department of Physics, Caixa Postal 702, 30.161 Belo Horizonte (MG), Brazil

60-cm Zeiss Cassegrain reflector -43 30 43.5 -19 49 20.2 1746 A 11/1972+
 15-cm Coudé refractor 11/1972+

Valongo Observatory, Ladeira do Pedro Antonio 43, Saude ZC-05, 20.080 Rio de Janeiro, Brazil

30-cm Cooke equatorial refractor -43 11 09.90 -22 53 51.3 52 A
 8-cm Zeiss refractor -43 11 09.90 -22 53 51.3 52 A
 11.6-cm refractor -43 11 11.3 -22 53 51.6 51 U

CANADA**Algonquin Radio Observatory**, National Research Council of Canada, Algonquin Provincial Park, Lake Traverse, Ontario K0A 2L0, Canada

45.7-m steerable altazimuth radio telescope -78 04 22.94 +45 57 19.8 260 NA 1966+
 10-m steerable equatorial parabolic radio telescope -78 04 13.2 +45 57 19.6 232 A
 1.6-m radio telescope -78 03 05 +45 57 13.6 232 A
 solar array -78 03 32.5 +45 56 42.2 234 A
 18-m radio telescope -78 03 38 +45 56 47 236 NA ?-1991; former; David Dunlap Obs. telescope

B=642-m 40-element interferometer

2.7-m equatorial horn reflecting antenna

1.8-m steerable equatorial paraboloid

David Dunlap Obs. instrument

Climenhaga Observatory, University of Victoria, Department of Physics and Astronomy, P.O. Box 1700, Victoria, B.C. V8W 2Y2, Canada

50-cm Lorenz Cassegrain reflector -123 18 30.0 +48 27 48.0 74 G 1977+
 30-cm reflector -123 18 31 +48 27 46 69 G ?-Summer 1985; former
 25-cm Schmidt telescope -123 18 31 +48 27 46 69 G ?-Summer 1985; former

David Dunlap Observatory, University of Toronto, Astronomy Department, P.O. Box 360, Richmond Hill, Ontario L4C 4Y6, Canada

1.88-m Dunlap Grubb-Parsons reflector -79 25 20 +43 51 46 244 G 1935+
 61-cm reflector -79 25 18 +43 52 00 244 G 1964+
 48-cm reflector
 15-cm refractor
 13-cm horizontal solar telescope with coelostat

1952-1984; museum

Former

Devon Astronomical Observatory, University of Alberta, Department of Physics, Edmonton, Alberta T6G 2J1, Canada

51-cm Cassegrain reflector -113 45 30.91 +53 23 26.9 708 NA 1977+
 31-cm reflector -113 31 30 +53 32 686 NA 1968+
 35-cm reflector -113 31 30 +53 32 686 NA 1978+

Dominion Astrophysical Observatory, National Research Council of Canada, 5071 West Saanich Road, R.R. 5, Victoria, B.C. V8X 4M6, Canada

1.85-m Plaskett Brashear/Warner & Swasey reflector -123 25 01.18 +48 31 11.9 238 NA 05/1918+
 41-cm reflector -123 24 51.1 +48 31 08.5 198 U Former; to Mt. Kobau
 41-cm Boller & Chivens reflector -123 25 09.22 +48 31 19.1 222 NA 11/1980+
 1.22-m Grubb-Parsons reflector -123 25 07.6 +48 31 16.5 230 NA 03/1962+
 15-cm reflector -123 25 03 +48 31 16 230 U Former
 76-mm refractor -123 25 03 +48 31 16 230 U Former

Dominion Radio Astrophysical Observatory, National Research Council of Canada-HIA, Box 248, Penticton, B.C. V2A 6K3, Canada

25.6-m paraboloid
 super synthesis radio telescope
 22 MHz T-shaped array
 10 MHz T-shaped array
 1.8-m paraboloid

-119 37 09.38 +49 19 13.9 545 G
 -119 37 12 +49 19 24 546 G Four 8.5-m paraboloids
 -119 37 12 +49 19 06 546 G c.1965-1970
 c.1966-1968

Elginfield Observatory, University of Western Ontario, Astronomy Dept., Physics and Astronomy Building, London, Ontario N6A 3K7, Canada

1.22-m Boller & Chivens Ritchey-Chrétien reflector -81 18 55.9 +43 11 32 323 G 1969+

Mont Mégantic Astronomical Observatory, Univ. of Montreal, Physics Dept., Boîte Postale 6128, Succursale A, Montreal, Quebec H3C 3J7, Canada

1.6-m Boller & Chivens reflector -71 09 09.7 +45 27 20.6 1114 G 1978+

Ottawa River Solar Observatory, National Research Council of Canada-HIA, 100 Sussex Drive, Ottawa, Ontario K1A 0R6, Canada

multiple photoheliograph
 -75 53 36 +45 23 13 58 NA 1973+

Rothney Astrophysical Observatory, University of Calgary, Physics and Astronomy Dept., 2920 24th Avenue N.W., Calgary, Alberta T2N 1N4, Canada

41-cm Cassegrain/Newtonian reflector -114 17 20.70 +50 52 06.7 1272 NA 1972+
 1.5-m infrared Cassegrain reflector Early 1980's+
 75-cm Baker-Nunn camera Inactive

CHILE

Cerro Calán National Astronomical Observatory, University of Chile, Casilla 36-D, Casilla 36-D, Santiago, Chile

19-cm Repsold meridian circle -70 32 45 -33 23 50 860 A 1963+
 Danjon astrolabe -70 32 42.7 -33 23 57.0 860 A From European Southern Obs.
 32-cm Gautier astrographic refractor -70 32 40 -33 23 53 860 A 1963+
 28-cm Heyde equatorial visual refractor -70 31 57 -33 23 32 860 G 1963+
 20-cm reflector -70 32 05.7 -33 23 31.0 860 G
 60-cm Grubb-Parsons equatorial refractor From National Obs., San Bernardo
 89-mm Bamberg broken-transit instrument
 Maksutov photographic vertical circle

Cerro El Roble Astronomical Observatory, Casilla 36-D, Santiago, Chile

70/100-cm Maksutov double-meniscus astrograph -71 01 12 -32 58 54 2220 A 1967+

Cerro Tololo Inter-American Observatory, Casilla 603, La Serena, Chile

61/92-cm Curtis Perkin-Elmer Schmidt reflector -70 48 52.7 -30 09 55.5 2215 A 1967+; Michigan Univ. telescope
 4.0-m Victor Blanco Ritchey-Chrétien equatorial refl. -70 48 53.6 -30 09 57.8 2235 A 10/1974+
 1.5-m Ritchey-Chrétien Cassegrain reflector -70 48 54.5 -30 09 56.3 2225 A 11/1967+
 1-m Boller & Chivens Ritchey-Chrétien reflector -70 48 51.8 -30 09 54.8 2215 A 1974+; from Yale Univ. Obs.
 92-cm Ritchey-Chrétien Cassegrain reflector -70 48 53.9 -30 09 54.8 2215 A
 61-cm reflector Co-owned with Lowell Obs.
 41-cm Cassegrain reflector #1 1964+
 41-cm Cassegrain reflector #2 1965+
 1.2-m SCMT Cassegrain radio telescope From Harvard Col. Obs.

European Southern Observatory, Casilla 19001-Correo 19, Santiago, Chile

1/1.6-m Zeiss Schmidt reflector	-70 43 46.5	-29 15 25.8	2347	A 1972+
1.52-m spectrographic Cassegrain/Coudé reflector	-70 43 55.3	-29 15 18.1	2347	A 07/1968+
1-m photometric Cassegrain reflector	-70 43 53.7	-29 15 21.0	2347	A 1966+
50-cm photometric reflector	-70 43 56.5	-29 15 15.0	2330	A 1971+; from Copenhagen Univ.
25/40-cm double astrophot refractor	-70 43 52.5	-29 15 23.2	2346	A
3.6-m equatorial Cassegrain/Coudé reflector	-70 43 36	-29 15 36	2428	A 1976+
70-cm Cassegrain reflector	-70 43 41.0	-29 15 30.0	2378	A Geneva Obs. telescope
1.4-m Coudé Auxiliary Telescope (CAT)				1980+
1.54-m Ritchey-Chrétien Cassegrain reflector				11/1979+; Copenhagen Univ. Obs. telescope
62-cm Cassegrain reflector				09/1968+; Bochum Obs. telescope
2.2-m Ritchey-Chrétien telescope				1984+; German telescope
3.5-m New Technology Telescope (NTT)				03/1989+
90-cm Cassegrain reflector				1979+; from Leiden Obs. Southern Sta
Very Large Telescope (VLT)				
15-m SEST submillimeter dish	-70 44 04	-29 15 34	2400	U 04/1988+; Swedish telescope

Las Campanas Observatory, Carnegie Institution of Washington, Casilla 601, La Serena, Chile

1.0-m Boller & Chivens reflector	-70 41 57	-29 00 27	2282	G 1971+
61-cm Hogg Cassegrain reflector	-70 41 58	-29 00 23	2276	G 08/1971+; David Dunlap Obs. telescope
2.54-m DuPont Cassegrain/Coudé reflector	-70 42 09	-29 00 11	2280	G 1977+; at Cerro Manquis site
25-cm wide-angle photographic refractor				From Lamont-Hussey Obs.
6.5-m Magellan I Cassegrain/Gregorian altaz. reflector	-70 42	-29 00	2300	U 1998+
6.5-m Magellan II reflector				

Maipo Radio Astronomy Observatory, University of Chile, Casilla 68-Correo 16, Maipo, Santiago, Chile

B=157x2-m 528-dipole filled rectangular array	-70 51 28	-33 30 05	446	A
B=27x54-m 4-dipole broadside array				
3-element yagi				
B=30x15-m 4-dipole broadside array				
pair of 4-element crossed yagis				
pair of 3-element crossed yagis				
5-element yagi				
7-element yagi				
B=9.3x65-m 15-dipole broadside array				
two pairs of 5-element crossed yagis				
log-periodic dipole				

Manuel Foster Astrophysical Observatory, Pontifical Catholic University of Chile, Casilla 6014, Santiago, Chile

93-cm Cassegrain equatorial reflector	-70 37 49.3	-33 25 05.6	840	G 1902-1948; 1981+
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Paranal Observatory, European Southern Observatory, Casilla 19001-Correo 19, Santiago, Chile

8.2-m Antu Very Large Telescope (VLT)-UT1	-70 24 11.64	-24 37 33.1	2635	U 04/1998+
8.2-m Kueyen Very Large Telescope (VLT)-UT2				
8.2-m Melipal Very Large Telescope (VLT)-UT3				

Beijing Normal University Observatory, Beijing Normal University, Department of Astronomy, Beijing 100875, People's Republic of China

48-cm horizontal solar telescope	+116 21 36.81 +39 57 26.7	70	G c.1958+
13-cm Zeiss equatorial refractor	+116 21 36.81 +39 57 26.7	70	G Former
40-cm reflector	+116 21 36.81 +39 57 26.7	70	G c.1987+
3-m equatorial radio telescope	+116 21 36.81 +39 57 26.7	70	G Former
1.5-m radio telescope	+116 21 36.81 +39 57 26.7	70	G c.1984+

Miyun Station, Beijing Astronomical Observatory, Zhongguancun 100080, West Suburb, Beijing, People's Republic of China

B=1-km 4x16-element compound interferometer

+116 45 52.0 +40 33 23.8

160 A 1967+; 28 9-m dishes

Purple Mountain Observatory, Chinese Academy of Sciences, 2 West Beijing Road, Nanjing, Kiangsu Province, People's Republic of China

+118 49 15.78 +32 04

267 A

91-mm photoelectric transit telescope			
15-cm astrophotograph			1965+
40/40-cm Zeiss twin astrophotograph			1934-1937, 1954+
43/60-cm Schmidt catadioptric camera			
60-cm reflector			
40-cm multichannel horizontal solar spectrograph			
14-cm Lyot H α chromosphere telescope			
20-cm refractor			

Ross variable star camera

13.5-cm meridian circle

15-cm theodolite

dual-frequency Doppler receiver

1.5-m 3-mm wavelength dish radiometer

1.5-m 8.6-mm wavelength dish radiometer

13.7-m antenna

2-m steerable paraboloid

40-cm paraboloid

D=1.5-m equatorial torquetum

D=c.2-m armillary sphere

3200 U At Delingha

1981+

1979+

From Imperial Obs.

From Imperial Obs.

Shaanxi Astronomical Observatory, Chinese Academy of Sciences, P.O. Box 18, Lintong, Xian, Shaanxi Province, People's Republic of China

+109 33 05.01 +34 56 43.5

468 A 1973+

+109 33 05.01 +34 56 43.0

468 A 1970+

+109 33 04.50 +34 56 43.3

468 A 1974+

1.05-m reflector

MX-1502 dual-frequency Doppler receiver

Long wave (BPL) radio station

Short wave (BPM) radio station

510 S 1981+

472 G 1980+

600 G 07/1980+

Shahe Station, Beijing Astronomical Observatory, Zhongguancun 100080, West Suburb, Beijing, People's Republic of China

10-cm Zeiss photoelectric transit instrument

10-cm optical Danjon astrolabe

60-cm solar reflector

40 A

40 A

40 A

18/18-cm twin photosphere-chromosphere telescope	+116 19 40	+40 06 06	40	A
20-cm Mark II photoelectric astrolabe	+116 19 40.89	+40 06 03.8	40	A 01/1976+
tracking theodolite	+116 19 36	+40 06 06	40	A
40-cm satellite laser ranging (SLR) system	+116 19 36	+40 06 06	40	A
dual-frequency Doppler receiver	+116 19 36	+40 06 06	40	A
3.2-cm wavelength solar radiometer	+116 19 40	+40 06 03	40	A
10-cm wavelength solar radiometer	+116 19 40	+40 06 03	40	A
35-cm coelostat				
Sheshan Station, Shanghai Astronomical Observatory, Sheshan (Zô-Sê), Shanghai, People's Republic of China				
40/40-cm twin equatorial astrographic refractor	+121 11 11.25	+31 05 47.6	100	U
1.56-m Ritchey-Chrétien astrometric reflector	+121 11 03.3	+31 05 46.1	97	U 11/1987+
60-cm laser ranging system	+121 11 30.27	+31 05 51.1	29	U 11/1983+
25-m radio telescope	+121 11 59	+31 05 57	31	U 10/1987+
Tianjing Latitude Station, Beijing Astronomical Observatory, Zhongguancun 100080, West Suburb, Beijing, People's Republic of China				
18-cm zenith telescope	+117 03 30	+39 08 02	10	A
26-cm vacuum photographic zenith tube	+117 03 30	+39 08 02	10	A
Urumqi Astronomical Station, Chinese Academy of Sciences, Beijing Road, Urumqi, People's Republic of China				
25-m radio telescope	+87 10 41	+43 28 16	2080	U 1994+
2-m radio telescope				
30-cm satellite laser ranging (SLR) telescope				
18-cm chromosphere-photosphere telescope				
15-cm theodolite				
Wuchang Time Observatory, Institute of Geodesy and Geophysics, Xu Dong Lu, Wuchang, Hubei, People's Republic of China				
automatic photoelectric transit instrument	+114 20 41.41	+30 32 28.7	28	A 1979-1987
Danjon astrolabe	+114 20 42.21	+30 32 28.7	28	A 1963-1985
photographic zenith tube	+114 20 43.01	+30 32 28.7	28	A 1987+
satellite laser ranging (SLR) station	+114 20 44.10	+30 32 30.5	39	S 07/1989+
Xinglong Station, Beijing Astronomical Observatory, Zhongguancun 100080, West Suburb, Beijing, People's Republic of China				
60/90-cm Zeiss Schmidt camera	+117 34 30	+40 23 39.3	870	A
60-cm reflector	+117 34 30	+40 23 39.3	870	A
40-cm Zeiss double astrograph	+117 34 30	+40 23 39.3	870	A
34-cm Mark III photoelectric astrolabe	+117 34 30	+40 23 36	----	U 03/1993+
2.16-m reflector				
1.26-m infrared telescope				
Xujiahui Station, Shanghai Astronomical Observatory, Xujiahui (Zi-Ka-Wei), Shanghai, People's Republic of China				
10-cm semiautomatic photoelectric transit instrument	+121 25 38.46	+31 11 25.0	5	A
10-cm Danjon astrolabe	+121 25 37.60	+31 11 25.0	5	A
20-cm Type II photoelectric astrolabe	+121 25 39.16	+31 11 25.5	5	A
dual-frequency Doppler receiver				
6-m radio telescope				
25-m radio telescope				

Yunnan Observatory, Chinese Academy of Sciences, P.O. Box 110, Kunming 650011, Yunnan Province, People's Republic of China
 No instrument given +102 47 18 +25 01 32.0 1940 U

- 1.02-m Zeiss Cassegrain/Coudé reflector
- Type II photoelectric asirolabe
- 10-cm Zeiss photoelectric transit instrument
- 35-cm reflector
- 13-cm refractor
- 10-cm Ross astrograph
- 30-cm horizontal solar telescope
- GDJ theodolite #1
- GDJ theodolite #2
- 50-cm SBG satellite camera
- 18-cm H_α chromosphere-photosphere telescope
- 40-cm horizontal spectroheliograph
- JSZ-4 dual-frequency Doppler receiver
- 10.7-cm wavelength radio telescope
- 8.2-cm wavelength radio telescope
- 3.2-cm wavelength radio telescope
- 40-cm satellite laser ranging (SLR) system
- 10-m solar radio telescope

+102 43 +25 03 2000 U 1985+

COLOMBIA

National Astronomical Observatory, National University of Colombia, Apartado Aéreo 2584, Bogotá 1 (D.E.), Colombia
 No instrument given -74 04 52.6 +4 35 55.2 2640 U

CROATIA, REPUBLIC OF

Geodetical Faculty Observatory, Zagreb University, Astronomical Institute, Kaciceva 26, P.P. 164, 41001 Zagreb, Republic of Croatia

- 9-cm Askania transit circle +16 01 16.6 +45 49 32.3 146 A
- 9-cm Askania zenith telescope +16 01 16.5 +45 49 32.3 146 A
- 6-cm Wild-T4 universal telescope +16 01 16.5 +45 49 32.3 146 A
- 13-cm refractor

Hvar Observatory, Zagreb University, 58450 Hvar, Republic of Croatia

- 65-cm reflector +16 26 51 +43 10 39 238 G c.1972+
- 13/21.7-cm double solar telescope +16 26 51.6 +43 10 38.9 244 A

CZECH REPUBLIC

Charles University Astronomical Institute, Charles University, Astronomy and Astrophysics Department, Svědská 8, 150 00 Prague, Czech Republic

- transit telescope +14 23 42 +50 04 36.0 267 A
- 17/25-cm Zeiss photovisual double astrograph +14 23 42 +50 04 35 267 EU
- 11-cm Zeiss refractor +14 23 42 +50 04 35 267 EU

75-mm Reinfelder-Hertel telescope	+14 23 42	+50 04 35	267	EU
97-mm Dollond refractor	+14 23 42	+50 04 35	267	EU
75-mm Zeiss refractor	+14 23 42	+50 04 35	267	EU
10-cm Somet binoculars	+14 23 42	+50 04 35	267	EU
25/16/42-cm Schmidt camera				To Ondřejov Obs.
65-cm Zeiss Cassegrain reflector				

Nicholas Copernicus Observatory, Kraví Hora, 616 00 Brno, Czech Republic

20-cm Zeiss refractor	+16 35 18	+49 12 15	310	A 1963+
15-cm Zeiss refractor	+16 35 18	+49 12 15	310	A 1957+
40-cm Nasmyth reflector	+16 35 18	+49 12 15	310	A 1988+
8-cm Zeiss refractor				1955-1965
44-cm Maksutov camera				Former
prominence coronagraph				Former
polarizing helioscope				
3-m paraboloid				

Ondřejov Observatory, Czech Republic Academy of Sciences, 251 65 Ondřejov, Czech Republic

20.3-cm Clark equatorial refractor	+14 47 01.2	+49 54 38.1	533	U
20-cm Zeiss equatorial double astrograph	+14 47 01.1	+49 54 38	528	EU
11-cm Schröder cometseeker	+14 47 01.2	+49 54 38.1	533	U
photographic zenith telescope	+14 47 09.31	+49 54 55.4	----	A
spectrohelioscope				
30-cm Zeiss photographic telescope				Charles Univ. telescope
40-cm Schmidt reflector				
65-cm Zeiss Cassegrain reflector				
10/11-cm double telescope				
Somet binoculars				
10-cm Askania transit telescope				Summer 1967+
2-m Zeiss reflector				
Fric astrograph				
coelostat				
satellite tracking camera				
7.5-m parabolic radio antenna #1				
7.5-m parabolic radio antenna #2				
3-m radio antenna				
meteor-radar camera and antenna				

Prostějov Observatory, Kolarovy Sady 3348, 796 01 Prostějov, Czech Republic

63-cm telescope	+17 09 48.48	+49 29 14.6	225	U 1955-1962
33-cm telescope	+17 09 48.48	+49 29 14.6	225	U c.1948+
44-cm telescope	+17 09 48.48	+49 29 14.6	225	U c.1955+
16-cm refractor				

Valašské Meziříčí Observatory , Vsetínska 78, 757 01 Valašské Meziříčí, Czech Republic	
20-cm Zeiss telescope	+17 58 30.6 +49 27 49.1 338 G
15-cm Zeiss Coudé telescope	+17 58 31.3 +49 27 50.5 338 G
15-cm Zeiss Cassegrain reflector	+17 58 31.6 +49 27 51.0 338 G
24-cm Götz Cassegrain reflector	+17 58 31.0 +49 27 50.9 338 G
13-cm Zeiss refractor	+17 58 30.6 +49 27 49.1 338 G
11-cm Zeiss refractor	+17 58 31 +49 27 50.8 338 G
10-cm Binar Somet refractor	+17 58 31 +49 27 50.8 338 G
60-cm reflector	

DENMARK

Copenhagen University Observatory-Brorfelde , Copenhagen University, Brorfeldevej 23, DK-4340 Tølløse, Denmark	
17.8-cm Grubb-Parsons meridian circle	+11 39 59 +55 37 31 90 EU 1953-03/1983; to La Palma, Canaries
25-cm photoelectric Cassegrain reflector	1955+
53/79-cm Schmidt reflector	1966+
50-cm reflector	1958-1969; to European Southern Obs.
40-cm photoelectric Cassegrain reflector	1961+

Copenhagen University Observatory-Ostervold , Copenhagen University, Øster Voldgade 3, DK-1350 Copenhagen, Denmark	
36/25-cm Repsold-Steinheil refractor	+12 34 37.73 +55 41 14.8 ----- EU 1895-1972
28-cm Merz refractor	1861-1972
12.2-cm meridian circle	1861-1972; to Perth Obs.
25-cm Meade Schmidt/Cassegrain NeST telescope	

Ole Rømer Observatory , Århus University, Langelandsgade, Bygning 520, DK-8000 Århus, Denmark	
40-cm Cassegrain reflector	+10 11 49 +56 07 40 50 U
50-cm Cassegrain reflector	
35-cm Schmidt reflector	Former
17/17-cm twin refractor	Former

ECUADOR

Quito Astronomical Observatory , Parque Alameda, Apartado 17-01-165, Quito, Ecuador	
astrolabe	-78 29 56.46 -0 12 57.3 2818 U
24-cm Merz/Munchen equatorial refractor	
9-cm Bamberg transit telescope	
16-cm Repsold/Sohne meridian circle	1889+

EGYPT

Helwân Observatory, Helwân, Cairo, Egypt

76.2-cm Reynolds-Common reflector	+31 22 45	+29 51 31.0	116	A 1905-?
Coudé refractor	+31 22 45	+29 51 31.0	116	A
transit circle	+31 22 45	+29 51 31.0	116	A
AFU-75 camera	+31 22 45	+29 51 31.0	116	A
10.2-cm Cooke astrograph				
8-cm Troughton & Simms meridian circle				
astrolabe				

Kottamia Observatory, c/o Helwân Observatory, Helwân, Cairo, Egypt

1.88-m Grubb-Parsons reflector	+31 49 30	+29 55 54	476	G
25-cm telescope				

ESTONIA

Wilhelm Struve Astrophysical Observatory, Estonian Academy of Sciences, Toravere, EE-2444 Tartu, Estonia

1.5-cm reflector	+26 28	+58 16	----	U 1975+
24.4-cm Fraunhofer refractor				

FINLAND

EISCAT Sodankylä Station, European Incoherent Scatter Facility, c/o Geophysical Observatory, SF-99600 Sodankylä, Finland

32-m dish antenna	+26 37 37.50	+67 21 49.3	197	EU
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Metsähovi Observatory, University of Helsinki, Astrophysical Laboratory, Tähtitorninmäki, SF-000130 Helsinki 13, Finland

60-cm Ritchey-Chrétien reflector	+24 23 49	+60 13 13	60	G
38-cm Väisälä Schmidt reflector				1981+; from Univ. of Helsinki Obs.

Metsähovi Radio Research Station, Helsinki University of Technology, Metsähovintie, SF-02540 Kylmäla, Finland

13.7-m steerable radio telescope	+24 23 38.41	+60 13 05.2	61	EU 1975+
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Tuorla Observatory, University of Turku, Väisäläntie 20, Tuorla, SF-21500 Piikkiö, Finland

39-cm visual zenith tube	+22 26 45	+60 24 57.5	40	A 1960+
40-cm Väisälä Schmidt anastigmatic reflector	+22 26 39	+60 24 57.0	41	A 1966+
60-cm Cassegrain reflector	+22 26 48	+60 24 58.6	39	A 1976+
70-cm Schmidt anastigmatic reflector	+22 26 49	+60 24 58.4	39	A 1979+
25-cm visual zenith tube	+22 26 49	+60 24 58.3	----	A 1973+
51/61-cm Schmidt reflector				Former; to Kerola station
1.03-m photometric telescope	+22 26 42	+60 24 57.2	53	A 1989+
photographic astrolabe	+22 26 49.6	+60 24 58.3	39	A 1977+

University of Helsinki Observatory, University of Helsinki, Astrophysical Laboratory, Tähtitorninmäki, SF-00130 Helsinki 13, Finland

meridian circle	+24 57 16.5	+60 09 42.3	33	A
33/25-cm Carte du Ciel double astrogaph	+24 57 21.9	+60 09 41.5	36	U 1890+
38-cm Väisälä Schmidt reflector	+24 57 11.07	+60 09 44.1	40	EU 1950-1981; to Metsähovi Obs.
15-cm Utzschneider transit instrument				1823-c.1890
D=61-cm Utzschneider vertical circle				1823-c.1890
76-mm Utzschneider-Fraunhofer heliometer				1824-c.1890
10-cm Reichenbach-Fraunhofer transit circle				1825-?
75-mm Utzschneider-Fraunhofer cometseeker				1830-c.1850
16.5-cm Merz/Utzschneider-Fraunhofer refractor				1836-c.1890; in situ

FRANCE

Besançon Observatory, Boîte Postale 1615, 41-A Avenue de l'Observatoire, F-25010 Besançon Cedex, France

4-cm OPL-31 Danjon astrolabe	+5 59 14.8	+47 14 57.2	312	A ?-c.1983; to Ast. Latitude Obs., Borowiec, Poland
19-cm Gautier meridian instrument	+5 59 18	+47 14 58.4	312	A Inactive
33/33/30-cm Secrétan astrogaph	+5 59 18.0	+47 14 57.7	315	A Inactive
33-cm Gautier equatorial Coudé telescope	+5 59 16.5	+47 14 59	315	A ?-1956; former
10-cm Gautier altazimuth telescope				Former
10-cm photographic equatorial telescope				Former
53-cm equatorial Coudé telescope				Former
21-cm Eichens-Cojan equatorial telescope				Former

Bordeaux University Observatory, Bordeaux University, Boîte Postale 89, 1 Avenue Pierre Sémirot, F-33270 Floirac, France

19.1-cm Eichens meridian circle	-0 31 39	+44 50 07	73	A
37.9-cm Merz-Gautier reflector	-0 31 37.9	+44 50 03.2	73	U
21.7-cm Eichens-Gautier reflector	-0 31 35.4	+44 50 07.1	73	U
33-cm Gautier photographic astrogaph				
62-cm Cassegrain reflector				
2-element interferometer	-0 31 37	+44 50 10	73	U 1973+; two 2.5-m steerable paraboloïds
7-m equatorial paraboloïd				

Calern Station, Côte d'Azur Observatory, 2130 Route de l'Observatoire, Caussols, F-06460 St. Vallier-de-Thiery, France

A.P.P. astrolabe	+6 55 36.03	+43 44 56.0	1270	A 1970+
solar astrolabe				1977+
1-m satellite laser ranging (SLR) telescope				1978+
1.5-m lunar laser ranging (LLR) telescope				1981+
90-cm astrometric Schmidt reflector				U 1981+
photoelectric astrolabe				c.1983+
B=144-m 2-element optical/infrared interferometer	+6 56	+43 45	1270	U 1977+; two 20-cm Coudé telescopes
15-m infrared interferometer				1982+
B=70-m optical interferometer				1985+; two 1.5-m telescopes

Côte d'Azur Observatory, Boîte Postale 139, F-06003 Nice-Cedex, France

74-cm equatorial refractor	+7 18 04.62	+43 43 21.9	372	A	1886+
30-cm Antares camera	+7 18 03.31	+43 43 36.5	377	EU	1970+
40-cm equatorial Coudé telescope	+7 18 01.71	+43 43 14.9	367	A	
50-cm equatorial refractor	+7 18 00.78	+43 43 12.3	363	A	
40/40-cm twin equatorial astrophotograph	+7 17 54.94	+43 43 04.3	323	A	
26-cm coronagraph	+7 18 02.35	+43 43 17.2	371	A	
20-cm Brünner meridian circle					
38-cm Gautier equatorial reflector					
8-cm altazimuth telescope					
70-cm Gautier equatorial telescope					

Grenoble Observatory, Joseph Fourier University-Grenoble, Astrophysical Group, CERMO-B.P. 53 X, 414 Rue de la Piscine, F-38041 Grenoble Cedex, France
+5 54 27 +44 38 02 2552 G 1986+

Lyon University Observatory, Lyon University, Avenue Charles André, F-69561 St. Genis Laval, France

60-cm Cassegrain reflector	+4 47 07.8	+45 41 41.0	299	A	
50-cm Schmidt telescope	+4 47 07.8	+45 41 41.0	299	A	
32-cm equatorial Coudé telescope					
15-cm Eichens meridian circle					
32-cm siderostat					
38-cm Schmidt telescope					
5-cm Rigaut transit instrument					
1.00-m Cassegrain reflector					

Meudon Observatory, Paris Observatory-Meudon, 5 Place Jules Janssen, F-92195 Meudon Cedex, France

83-cm Henry-Gautier visual refractor	+2 13 53	+48 48 18	162	G	1889+, mounted with 62-cm refractor
62-cm photographic refractor	+2 13 53	+48 48 18	162	G	1891+, mounted with 83-cm refractor
20-cm photographic refractor	+2 13 51.34	+48 48 25.4	165	EU	
13.5-cm photoheliograph					
1.00-m Henry-Gautier Newtonian reflector					1893+
60-cm Schaer Cassegrain reflector					?-1924; to High Alpine Sta., Switzerland; 1969+
38-cm solar telescope					1968+
30-cm solar telescope					1970+
41-cm solar telescope #1					
41-cm solar telescope #2					
25-cm Eichen equatorial telescope					
21-cm Eichen equatorial telescope					

Millimeter Radio Astronomy Institute, Domaine University-Grenoble, F-38406 St. Martin d'Hères, France

+5 54 26.0 +44 38 01.2 2552 G 1988+, four 15-m telescopes

Nançay Radio Astronomy Station, Paris Observatory, F-18330 Neuvy Sur Barangeon, France

304.8-m radio telescope	+2 11 49	+47 22 48	150	A	1976+
7-m paraboloid					1972+
EW array of 16x5-m paraboloids					1970+
NS array of 8x10-m paraboloids					1977+
40x200-m semidirectional radio telescope					1966+

EW array of 16x1-m paraboloids
100x100-m 96 spiral log-periodic antenna array

Observatory of Haute-Provence, St. Michel l'Observatoire, F-04300 Forcalquier, France

1.93-m Grubb-Parsons Newt./Cass./Coudé reflector	+5 42 46.75 +43 55 53.3	665	G 07/1958+
1.52-m spectrographic reflector	+5 42 43.82 +43 56 00.2	667	G 1967+
1.20-m Newtonian reflector	+5 42 56.50 +43 55 54.3	635	G 1943+; from Paris Obs.
1.00-m Marly Schaeer Cassegrain reflector	+5 43 00.6 +43 55 53.4	653	U 1964+; Geneva Obs. telescope
astrolabe	+5 42 59.78 +43 55 52.2	----	A Former
30-cm Schmidt camera	+5 42 49.28 +43 56 01.1	659	EU Former
81-cm Newtonian/Cassegrain reflector			1945+
20-cm equatorial telescope			Former
60/90-cm Schmidt camera			1970+; Belgian telescope
15-cm refractor			
41-cm refractor			
2-element interferometer			Former; two 32x60-m parabolic cylinders

Paris Observatory, 61 Avenue de l'Observatoire, F-75014 Paris, France

19-cm Eichens meridian circle	+2 20 13.6 +48 50 11	67	U
24.9/24.1-cm Mailhat equatorial double astroph	+2 20 11.8 +48 50 08.9	67	A
6-cm Danjon astrolabe	+2 20 15.43 +48 50 09.2	66	A
75-mm Gautier telescope			1922+
10.2-cm Routy telescope			
60-cm equatorial Coudé telescope			
27-cm equatorial Coudé refractor			
30.5-cm Secrétan-Eichens equatorial telescope			1858+
38-cm Brünner-Henry equatorial refractor			
20-cm Secrétan reflector			
40-cm Foucault-Secrétan telescope			
60-cm Newtonian reflector			
80-cm Foucault telescope			
1.20-m Newtonian reflector			
76-cm Gautier-Henry refractor			
33-cm Henry photographic refractor			
12-cm Gambey meridian circle			
15-cm Gambey transit instrument			
10-cm Gambey equatorial refractor			
20-cm Short Gregorian reflector			
11-cm Ramsden achromatic transit instrument			
Lenoir transit instrument			
56-cm Gregorian reflector			
18-cm Dollond Gregorian reflector			
89-mm Charité achromatic transit instrument			
89-mm de Pange Dollond achromatic refractor			
89-mm de Conti Dollond achromatic refractor			
Migon refractor			
R=91-cm portable quadrant			
R=1.83-m Couplet mural quadrant #1			

R=1.83-m	Couplet mural quadrant #2	1672-?
R=81-cm	portable quadrant	1673-1742; to Capuchine Convent
R=91-cm	portable quadrant	1673-?
R=1.83-m	octant	1673-?
R=1.52-m	mural quadrant	1683-c, 1785; from Picard
R=1.52-m	mural quadrant	1683-1787; from La Hire
R=3.05-m	zenith sector #1	1701-?
R=3.05-m	zenith sector #2	1718-?
R=1.83-m	Langlois mural quadrant	1732-c, 1778
R=1.07-m	Langlois mural quadrant	1738-c, 1778
R=1.83-m	Langlois quadrant	1742-c, 1785
R=1.83-m	Langlois sector	1740-1748; to Mazarin College
R=28-cm	semicircle	1765-1777
R=91-cm	portable Canivet quadrant	1771-c, 1777
R=30-cm	portable quadrant	?-c, 1778
R=76-cm	Langlois quadrant	1778-c, 1783
R=2.5-m	Bird mural quadrant	1799-1834; O=6-cm; museum
R=1.62-m	Sisson mural quadrant	1799-1819; from Royal Obs., Berlin, Germany
D=91-cm	Reichenbach repeating circle	1811-1832; O=84-mm; museum
11-cm	Fortin-Lerebours mural circle	1822-c, 1853
R=2.5-m	Bird mural quadrant	1835-1838; O=8-cm; to Toulouse Obs.

Pic du Midi Observatory, 9 Rue du Pont de la Moulette F-65200 Bagnères-de-Bigorre, France

solar instruments		
1.06-m	Cassegrain reflector	+0 08 39 +42 56 12.0 2861 A
2.03-m	reflector	+0 08 35.1 +42 56 11.0 2865 U
25-cm	student telescope	1963+
60-cm	Gentili reflector	1980+
60-cm	Schaer reflector	
41-cm	solar telescope	
60-cm	Henry-Gautier Coudé telescope	
23-cm	refractor	1908+
50-cm	Newtonian reflector	1974+
30-cm	refractor	
60-cm	Baillaud refractor	1904+
38-cm	refractor	
20-cm	Liot coronagraph	07/1931+
coelostat for horizontal solar telescope		
coronal white-light polarimeter		

Strasbourg Observatory, Louis Pasteur University, 11 Rue de l'Université, F-67000 Strasbourg, France

19-cm	meridian circle	+7 46 12.19 +48 35 01.4 142 G
48.6-cm	Merz-Repsold equatorial refractor	+7 46 08.46 +48 35 03.0 156 G
23-cm	refractor	+7 46 07.63 +48 35 00.2 152 A
16.2-cm	Reinfelder-Hertel/Repsold equatorial refractor	+7 46 11.13 +48 35 01.3 153 G
51-cm	telescope	+7 46 07.63 +48 35 00.8 152 A
30-cm	Zeiss FK camera	+7 46 11.14 +48 35 01.9 154 EU
16-cm	Repsold-Bouty meridian circle	

- 13.6-cm Merz-Repsold altazimuth telescope
- 13.2-cm Cauchois meridian telescope
- 76-mm Fraunhofer heliometer
- 16.2-cm Merz cometseeker

Toulouse University Observatory, Toulouse University, 1 Avenue Camille Flammarion, F-31500 Toulouse, France

+1 27 45 +43 36 44 195 U

No instrument given

- 83-cm Henry-Gautier equatorial reflector
- 39-mm equatorial visual refractor
- 21-cm Gautier meridian circle
- 53-cm Schmidt telescope
- 33-cm astrograph
- 25-cm telescope
- 42-cm Schmidt telescope
- 33/19-cm Carte du Ciel photovisual telescope
- 11-cm Ramsden achromatic transit instrument
- R=2.5-m Bird mural quadrant
- 53-cm quadrant

1847-1890; from Paris Obs.
1838-1881; from Paris Obs.; O=8-cm; museum
c.1838-?; museum

GEORGIA

Abastumani Astrophysical Observatory, Georgia Academy of Sciences, Mount Kanobili, 383762 Abastumani, Georgia

- 40-cm Zeiss refractor
- 40-cm double astrograph
- 70/96-cm Maksutov meniscus photographic telescope
- 8-cm cometseeker
- 33-cm reflector
- 125-cm automatic reflector
- 20-cm double refractor
- field binoculars
- 48-cm reflector
- 36/44-cm Schmidt camera
- 44-cm horizontal solar telescope
- 53-cm coronagraph
- 12-cm coronagraph
- chromosphere-photosphere telescope
- spectrohelioscope
- spectroheliograph
- 2-element vertical array interferometer

+42 49 20.0 +41 45 17.0 1583 A 1937+
+42 48 55.6 +41 45 25.4 1615 A 1978+
+42 49 13.8 +41 45 14.9 1596 A 1955+
+42 49 31.2 +41 45 18.2 1580 A
+42 49 31.2 +41 45 18.2 1580 A 1932+
+42 49 16.4 +41 45 15.0 1593 A 1980+
+42 49 31.2 +41 45 18.2 1580 A
+42 49 31.2 +41 45 18.2 1580 A
1968+
1938+
1966+
1972+
1966+
1957+
1937+
1954+
1968+

GERMANY

Archenhold Observatory, Alt-Treptow 1, D-O-1193 Berlin, Germany

- 68-cm Steinheil-Zeiss equatorial refractor
- 15-cm Coudé refractor

+13 28 40.1 +52 29 11.4 41 A 05/1896+
+13 28 28 +52 29 04 38 EU 1962+

10-cm refractor	+13 28 28	+52 29 04	38	EU Former
8-cm refractor	+13 28 28	+52 29 04	38	EU Former
12-cm astrograph	+13 28 39.6	+52 29 11.8	42	A 1963+
25-cm Newtonian reflector	+13 28 40.4	+52 29 12.2	42	A 1952+
6-cm transit instrument				Former
50-cm Cassegrain reflector	+13 28 35.9	+52 29 15.3	41	A 1962+
25-cm cometseeker	+13 28 39.9	+52 29 12.2	42	A 1967+
20-cm Jensch coclostat	+13 28 33.3	+52 29 15.2	----	A 1968+
15-cm Urania refractor	+13 28 39.3	+52 29 12.0	42	A 1988+

Bochum Observatory, Bochum Planetarium, Castropoer Strasse 67, D-W-4630 Bochum 1, Germany

+7 13 24.4 +51 27 54.8 132 U

12-cm refractor				
40-cm reflector				
15-cm refractor				
26-cm reflector				Former
11-cm refractor				
32-cm reflector				

Central Institute for Earth Physics, Telegrafenberg A 17, D-O-1561 Potsdam, Germany

10-cm Danjon astrolabe	+13 04 00.64	+52 22 54.7	91	A 1957-1985
25-cm photographic zenith tube	+13 06 18.00	+52 24 24.9	70	A 1972-1982
50/40/79-cm satellite camera	+13 04 01.8	+52 22 55.2	109	A 1966-1973
15-cm Zeiss Cassegrain reflector	+13 04 01.8	+52 22 55.2	109	A ?-1975
11-cm Zeiss telescope	+13 04 01.8	+52 22 55.2	109	A ?-1967
7-cm Reinfelder-Hertel refractor	+13 04 01.8	+52 22 55.2	109	A ?-1962
54-mm Merz refractor	+13 04 01.8	+52 22 55.2	109	A
9-cm transit telescope #1	+13 04 01.04	+52 22 54.3	91	A ?-1968
9-cm transit telescope #2	+13 04 01.04	+52 22 54.3	91	A ?-1974
10-cm Zeiss transit telescope	+13 04 01.04	+52 22 54.3	91	A ?-1968
25-cm Zeiss photographic zenith tube	+13 04 00.39	+52 22 54.3	91	A 1980+

Effelsberg Radio Observatory, Max Planck Institute for Radio Astronomy, Auf dem Hügel 69, D-W-5300 Bonn 1, Germany

100-m steerable parabolic radio telescope +6 53 03.7 +50 31 33.8 369 G 1970+

Einstein Tower Solar Observatory, Central Institute for Solar-Terrestrial Physics, Telegrafenberg, D-O-1560 Potsdam, Germany

+13 03 54 +52 22 50 100 U

60-cm solar tower telescope	
10.4-m radio dish	
7.6-m radio dish	
3.35-m radio dish	

Friedrich Schiller University Observatory, Friedrich Schiller University-Jena, Physics Department, Schillergässchen 2, D-O-6900 Jena, Germany

90/60-cm Zeiss Schmidt/Cassegrain reflector	+11 29 13	+50 55 48	356	U 1962+; Grossschwabhausen site
20-cm Bamberg-Zeiss refractor	+11 35 03.00	+50 55 34.9	164	A 1891-c.1927; City Obs.
85-mm Schröder transit telescope				1813-c.1830
77-mm Utzschneider-Fraunhofer refractor	+11 35 03.00	+50 55 34.9	164	1824-c.1880
29-cm Zeiss mirror-prism camera	+11 35 04.00	+50 55 35.5	164	A 1936+; City Obs.
16-cm Newtonian reflector				A 1793-c.1830
74-mm Utzschneider-Fraunhofer refractor				1813-c.1830

12.2-cm Koerner refractor				1817-c.1830
77-mm Bamberg meridian circle				1892-1965; City Obs.
30-cm Zeiss zenith telescope	+11 35 03.00	+50 55 34.6	----	U 1901-1920; City Obs.
20/20-cm Zeiss twin astrograph	+11 33 00	+50 55 29	350	U 1931-1945; Forest station
35-cm Zeiss Schmidt reflector				1936-1950; Forest station
50-cm Cassegrain reflector	+11 33 00	+50 55 29	350	U 1950-1963; Forest station
Göttingen University Observatory , Göttingen University, Geismarlandstrasse 11, D-W-3400 Göttingen, Germany				
12-cm Reichenbach transit telescope	+9 56 33.3	+51 31 48.1	161	A 1819-c.1887; former
38/50-cm Schmidt reflector				1937+
45-cm solar tower telescope				1944+
34-cm Zeiss astrograph				1930+
19-cm Schöbloch refractor				1904-1939; former
16-cm Repsold heliometer				1888-1926; former
10-cm Repsold meridian circle				1818-1926; former
11-cm Reichenbach meridian circle				1819-1932; former
22-cm Herschel Newtonian reflector				c.1811-1834; museum
21-cm Hauswaldt reflector				1911-1939; former
8-cm Fraunhofer-Utzschneider heliometer				1814-1924; museum
1.83-m Bird mural quadrant				c.1811-1817; museum
Hamburg Observatory , University of Hamburg, Gojenbergsweg 112, D-W-2050 Hamburg 80, Germany				
60-cm Repsold/Steinheil refractor	+10 14 28.86	+53 28 51.4	45	PD 1912+
19-cm Repsold transit circle	+10 14 31.14	+53 28 50.9	41	PD Former; museum
1-m Zeiss reflector	+10 14 32.29	+53 28 55.2	41	PD 1913+
80/120-cm Zeiss Schmidt camera				08/1955-?; to German Spanish Center, Spain
15/15-cm Zeiss photovisual twin astrograph				Former
25.6-cm Repsold equatorial telescope				Former
34/20/30-cm Lippert Zeiss photovisual astrograph				1973+
30-cm Zeiss zone astrograph				1974+
1.20-m reflector				
Hoher List Observatory , Friedrich Wilhelms University-Bonn, D-W-5568 Daun, (Eifel), Germany				
1.06-m Nasmyth Cassegrain reflector	+6 51 00.02	+50 09 45.3	533	G 1965+
36-cm Cassegrain reflector	+6 50 59.05	+50 09 47.5	543	G
34/50-cm Schmidt reflector	+6 50 56.57	+50 09 46.8	545	G 1953+
30/36-cm photovisual double refractor	+6 51 02.02	+50 09 48.5	541	G 1965+
30-cm astrograph	+6 50 58.25	+50 09 47.5	544	G 1968+
60-cm Ritchey-Chrétien reflector				1984+
16-cm Schröder refractor				
Institute of Geodesy Astronomical Observatory , Hannover University, Nienburger Strasse 5, D-W-3000 Hannover 1, Germany				
20-cm zenith camera	+9 42 45.8	+52 23 15.0	71	A
20-cm visual refractor	+9 42 47	+52 23 15	71	A
20/25-cm Schmidt reflector	+9 42 47	+52 23 16	71	A Former
20-cm Cassegrain reflector	+9 42 47.25	+52 23 14.1	70	U
27-cm Cassegrain reflector	+9 42 46.80	+52 23 14.3	70	U

15-cm H_α refractor

Karl Schwarzschild Observatory, Central Institute for Astrophysics, D-O-6901 Tautenburg, Germany
1.34/2.0-m Zeiss Schmidt equatorial reflector +11 42 45 +50 58 51 331 A Fall 1960+

Lohrmann Observatory, Dresden Technical University, Mommsenstrasse 13, D-O-8027 Dresden, Germany

30-cm Sonnefeld astrograph +13 52 18.6 +51 02 57.4 324 A 1976+
30-cm Heyde refractor +13 43 47.2 +51 01 52.0 171 A 1957+
10-cm Zeiss transit instrument +13 43 59 +51 03 16.0 121 A 1957+
20-cm Heyde refractor +13 43 51 +51 01 51 171 EU 1957+
11-cm Zeiss refractor +13 43 51 +51 01 51 171 EU ?-1978; former
20-cm Medial telescope +13 43 51 +51 01 51 171 EU ?-1965
10-cm Sucher telescope +13 43 51 +51 01 51 171 EU 1957+

Munich University Observatory, Munich University, Scheinerstrasse 1, D-W-8000 Munich 80, Germany

19-cm Askania vertical circle +11 36 30.3 +48 08 44.3 529 A ?-1954; to Mt. Stromlo Obs., Australia
10-cm Reinfelder-Hertel refractor +11 36 27 +48 08 48 535 EU
20-cm Reinfelder refractor +11 36 27 +48 08 48 535 EU
28.4-cm Fraunhofer/Merz & Mahler refractor 1835-?
16.2-cm Repsold meridian circle
11.4-cm double photographic refractor
19-cm Reinfelder telescope
11.4-cm Reichenbach meridian circle 1819-?
75-mm Utzschneider-Fraunhofer heliometer c.1820-?; museum

Potsdam Astrophysical Observatory, Central Institute for Astrophysics, Telegrafenberg, D-O-1560 Potsdam, Germany

80/50-cm Steinheil-Repsold equatorial double refractor +13 03 57.9 +52 22 56.0 107 A 1899+
50/70-cm catadioptric Schmidt camera To Mt. Rozhen Obs.
70-cm Cassegrain reflector
60-cm solar tower telescope 1924+
40-cm Schmidt reflector 1905+
28-cm Merz astrographic refractor
20-cm double horizontal camera
20-cm astrograph

Remeis Observatory, Erlangen-Nürnberg University, Astronomical Institute, Sternwartestrasse 7, D-W-8600 Bamberg, Germany

60-cm Cassegrain reflector +10 53 24 +49 53 06.4 288 A
26.4-cm refractor +10 53 21 +49 53 07 288 EU
Repsold heliometer
15-cm cometseeker +10 53 24 +49 53 06.4 288 A Former
40-cm Cassegrain reflector +10 53 24 +49 53 06.4 288 A
13.5/13.5-cm twin astrograph +10 53 24 +49 53 06 288 A ?-c.1965; to Boyden Obs., South Africa
Former

Schauinsland Observatory, Kiepenheuer Institute for Solar Physics, Schöneckstrasse 6, D-W-7800 Freiburg-im-Breisgau, Germany

45-cm solar tower refractor	+7 54 21.7	+47 54 51.9	1240	PD	With 60-cm coelostat
15-cm refractor	+7 54 20.2	+47 54 51.0	1240	PD	Former
25-cm Cassegrain reflector					With 30-cm coelostat
20-cm solar tower refractor					

Sonneberg Observatory, Central Institute for Astrophysics, Sternwartestrasse 32, Postfach 55-27/28, D-O-6400 Sonneberg-Neufang, Germany

60-cm Cassegrain reflector	+11 11 32.85	+50 22 41.4	640	A	1973+
60-cm Cassegrain reflector	+11 11 33.1	+50 22 42.2	643	G	1959+
50/70-cm Schmidt camera	+11 11 29.1	+50 22 44.4	647	G	1959+
40-cm Zeiss astrograph	+11 11 31.8	+50 22 43.2	642	G	1965+
13.5-cm Zeiss visual refractor	+11 11 31.05	+50 22 42.3	642	G	1973+
30/30-cm twin Schmidt telescope	+11 11 29.8	+50 22 43.4	640	A	Former
40-cm astrograph	+11 11 30.95	+50 22 44.4	646	G	1961+
13-cm refractor	+11 11 31.4	+50 22 44.4	630	U	Former
15-cm equatorial telescope	+11 11 31.2	+50 22 38.6	630	G	Former
10-cm Zeiss refractor	+11 11 31.2	+50 22 38.6	630	G	Former
8-cm Zeiss refractor	+11 11 31.2	+50 22 38.6	630	G	Former
20-cm Zeiss refractor	+11 11 29.8	+50 22 44.4	640	U	Former
16.2-cm Merz refractor	+11 11 30.9	+50 22 41.8	640	U	Former
14.8-cm Merz refractor	+11 11 32.5	+50 22 43.4	640	U	Former
35-cm reflector	+11 11 31.2	+50 22 42.4	640	U	Former
46-cm reflector	+11 11 31.8	+50 22 43.3	640	U	Former
11-cm Zeiss cometseeker	+11 11 29.4	+50 22 43.4	640	U	Former
sky patrol instrument	+11 11 30.15	+50 22 44.4	646	G	1959+

State Observatory, Königstuhl, D-W-6900 Heidelberg, Germany

16-cm Reinfelder meridian circle	+8 43 16.95	+49 23 54.6	570	A	Museum
40/39.6/25-cm Bruce Brashear/DePauly astrograph	+8 43 31	+49 23 57	570	EU	1900+
21.7-cm Merz refractor	+8 43 16.9	+49 23 54.6	570	A	Museum
32.7-cm Steinheil refractor					Museum
16.4-cm Steinheil refractor					Museum
13.5-cm Steinheil refractor					Museum
12.1-cm Reinfelder cometseeker					Museum
66-mm Bamberg transit instrument					Museum
81-mm Heyde transit instrument					Museum
71.5-cm Zeiss reflector					1906+
50-cm photometric Cassegrain reflector					?-c.1966; to Boyden Obs., South Africa
15.9/15.9/16.2-cm Voigtländer/Reinfelder photographic triplet					Museum
15.9-cm Fraunhofer heliometer					Museum
75-cm Zeiss altazimuth telescope					1978+
70-cm Cassegrain reflector					1989+
26/40-cm Schmidt reflector					1963+

Stockert Radio Observatory, Friedrich Wilhelms University-Bonn, Radio Astronomy Institute, Auf dem Hügel 71, D-W-5300 Bonn 1, Germany

25-m steerable altazimuth parabolic antenna	+6 43 23.45	+50 34 12.9	435	EU	1956+
10-m equatorial paraboloid	+6 43 27.3	+50 34 14	418	G	1967-1975

Stuttgart Observatory, Mittlerer Schlossgarten, Willy-Brandt-Strasse 25, D-W-70173 Stuttgart, Germany
 25-cm Astro-Physics/Mikage triple reflector +9 35 50.20 +48 52 30.4 547 U

Swabian Observatory, Geschäftsstelle 59a, D-W-70174 Stuttgart, Germany

17.5-cm Zeiss reflector +9 11 50.9 +48 47 00.7 344 G
 20-cm Staus reflector +9 11 51.0 +48 47 00.3 350 PD
 35-cm Celestron Schmidt/Cassegrain reflector +9 11 51.0 +48 47 00.2 350 EU
 12.5-cm Zeiss reflector +9 11 50.8 +48 47 00.7 354 A Former
 23-cm reflector +9 11 50.8 +48 47 00.5 351 A Former
 14/7-cm double astrograph Former
 17.5-cm Astro-Physics Starfire telescope

Tremsdorf Radio Astronomy Observatory, Central Institute for Astrophysics, D-O-1501 Tremsdorf, Germany

10.5-m paraboloid radio antenna +13 08 12.3 +52 17 06.3 35 U
 8-m radio telescope Former

Tübingen University Astronomical Observatory, Tübingen University, Waldhäuser Strasse 64, D-W-7400 Tübingen, Germany

40-cm Cassegrain telescope +9 03 32 +48 32 20 470 U
 30-cm reflector +9 03 22.8 +48 32 19.0 480 EU
 3-m 7.5-cm wavelength radio telescope
 3-m 3-cm wavelength radio telescope
 7-m parabolic antenna +9 35 +47 46 450 U Ravensburg site
 dipole reflector +9 35 +47 46 450 U Ravensburg site

Wendelstein Solar Observatory, Munich University, Institute for Astronomy and Astrophysics, Wendelsteingipfel, D-W-8163 Bayrischzell, Germany

10-cm coronagraph +12 00 48.9 +47 42 28.0 1838 U

Wilhelm Foerster Observatory, Munsterdamm 90, (Schöneberg), D-W-1000 Berlin 41, Germany

32-cm reflector +13 21 11.2 +52 27 31.7 78 G From Urania Obs., Berlin
 75-cm reflector 1973+
 15-cm reflector 1968+
 50-cm heliostat 1987+
 20-cm reflector 1950's+
 20-cm Grandt equatorial refractor
 18-cm Newtonian reflector
 10-cm Grandt refractor
 10-cm Steinheil refractor
 68-mm Merz refractor
 12.5-cm Leitz equatorial astrograph
 20-cm Grandt equatorial Newtonian reflector
 18-cm Grandt equatorial refractor

GREECE

Kryonerion Astronomical Observatory, National Observatory of Athens, Astronomical Institute, P.O. Box 20048, GR-118 10 Athens, Greece

1.22-m Grubb-Parsons Cassegrain/Coudé reflector +22 37 15 +37 58 22.4 905 G 09/1975+

National Observatory of Athens. Astronomical Institute, P.O. Box 20048, GR-118 10 Athens, Greece

40-cm Doridis equatorial visual refractor	+23 43 10	+37 58 24	110	EU
20-cm Ionidis Browning equatorial reflector	+23 43 10	+37 58 28	110	EU
11-cm Secrétan refractor	+23 43 10	+37 58 28	110	EU
6-cm Zeiss equatorial telescope	+23 43 10	+37 58 28	110	EU
8-cm Merz refractor	+23 43 10	+37 58 28	110	EU
6-cm Polarex telescope	+23 44 52	+37 58 24	119	EU
17-cm Plössl equatorial refractor				
10-cm Starke-Fraunhofer transit circle				
6-cm Gautier meridian circle				

Pentetele Astronomical Station, National Observatory of Athens, Astronomical Institute, P.O. Box 20048, GR-118 10 Athens, Greece

63-cm Newall Cooke equatorial visual refractor	+23 51 55.2	+38 02 59.5	516	EU 05/1960+; from Cambridge Univ. Obs.
30-cm equatorial reflector				
11-cm equatorial photovisual refractor				
8-cm Zeiss refractor				
5-cm Watt's geodetic theodolite				
25-cm Bruce astrograph				
22-cm Schmidt camera				
25-cm Ross lens				
44-m solar radio telescope				

Stephanion Observatory, University of Thessaloníki, GR-200 08 Stephanion, Corinth, Greece

76-cm Astro-Mechanics Cassegrain reflector	+22 49 44	+37 45 15	800	A 1971+	
40-cm reflector				1967-1973;	Sonnenborgh Obs. telescope
38-cm reflector				1967-1970;	Hamburg Obs. telescope
Doppler/laser satellite tracking station				1966+;	French CNES station

University of Thessaloníki Observatory, University of Thessaloníki, Department of Astronomy, GR-540 06 Thessaloníki, Greece

20-cm refractor	+22 57 30	+40 37 00	28 G
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GREENLAND

Incoherent Scatter Facility, Stanford Research Institute, 333 Ravenwood Avenue, Menlo Park, California 94025

32-m antenna -50 56 58 +66 59 12 180 U 02/1983+

HUNGARY

Gyula Observing Station, Heliophysical Observatory, P.O. Box 30, H-4010 Debrecen, Hungary

15-cm photoheliograph

Heliophysical Observatory, P.O. Box 30, H-4010 Debrecen, Hungary
 53-cm Lyot Coudé coronagraph +21 37 22 +47 33 37 132 A 1976+
 25/15-cm double photoheliograph +21 37 20 +47 33 37 ---- A 1958+
 25/13-cm double Cassegrain photoheliograph
 10-cm modified Hale spectrohelioscope

Konkoly Observatory, Hungarian Academy of Sciences, P.O. Box 67, H-1525 Budapest, Hungary
 60-cm Heyde-Zeiss Newtonian/Cassegrain reflector +18 57 51.1 +47 29 58.6 474 A 1928+
 19-cm Browning-Merz refractor +18 57 52.0 +47 29 58.5 474 A 1920+
 30-cm refractor +18 57 52.0 +47 29 58.5 474 A Former
 60/90-cm Schmidt reflector Former
 50-cm reflector Former
 40-cm reflector Former

Piszkéstető Mountain Station, Konkoly Observatory, P.O. Box 67, H-1525 Budapest, Hungary
 1-m Zeiss Ritchey-Chrétien reflector +19 53 44.1 +47 55 04.2 958 D1 1975+
 60/90-cm Zeiss Schmidt reflector +19 53 39.6 +47 55 05.9 938 D1 1962+
 50-cm Zeiss Cassegrain reflector +19 53 37.8 +47 55 09.8 948 D1 1966+

Urania Observatory, Sánc Utca 3/B, H-1016 Budapest I., Hungary
 20-cm Heyde-Merz refractor +19 03 51 +47 29 05.2 166 G 1947+
 12.5-cm Zeiss Cassegrain reflector 1980+
 8-cm Zeiss refractor
 63-mm Zeiss telescope #1
 63-mm Zeiss telescope #2

INDIA

Gauribidanur Radio Observatory, Indian Institute of Astrophysics, Bangalore 560 034, India
 T-shaped decameter-wavelength dipole array +77 26 07 +13 36 12 686 U 1980+

Gurushikhar Infrared Observatory, Physical Research Laboratory, Hill View, Mount Abu 307 501, India
 1.2-m infrared reflector +72 46 47 +24 39 08 1700 1N
 35-cm Schmidt Cassegrain reflector

Japal-Rangapur Observatory, Osmania University, Department of Astronomy, Hyderabad 500 007, India
 1.22-m reflector +78 43 42 +17 05 54 695 A 1968+; Nizamiah Obs. telescope
 13.05-m equatorial radio telescope +78 43 42 +17 05 54 695 A 02/1980+

Kodaikanal Solar Observatory, Indian Institute of Astrophysics, Kodaikanal 624 103, India
 38-cm solar tower refractor +77 28 07.0 +10 13 50.0 2343 A With 61-cm coelostat
 51-cm Bhavnagar telescope Inactive
 20-cm refractor Inactive
 30-cm solar telescope
 15-cm solar telescope
 76-cm solar telescope

2-element interferometer

1952-?; former

National Centre for Radio Astrophysics, c/o Pune University Campus, Post Bag 3, Ganeshkhind, Pune 411007, India
Giant Metrewave Radio Telescope (GMRT) +74 03 +19 06 650 U 30 45-m parabolic dishes

Nizamiah Observatory, Osmania University, Department of Astronomy, Hyderabad 500 007, India

20-cm astrograph +78 27 12 +17 25 54.3 554 A
38-cm Grubb refractor +78 27 12 +17 25 54.3 554 A
76-mm portable telescope +78 27 12 +17 25 54.3 554 A
transit instrument

Radio Astronomy Center, Tata Institute of Fundamental Research, P.O. Box 8, Udhagamandalam, Ootacamund 643 001, India

530x30-m Ooty Synthesis Radio Telescope (OSRT) +76 40 02 +11 22 56 2150 A 1970+
B=4-km radio interferometer +76 40 02 +11 22 56 2150 A
VHE gamma ray telescope array Ten 90-cm and eight 1.5-m mirrors

Uttar Pradesh State Observatory, Manora Peak, Naini Tal 263 169 (U.P.), India

79/51-cm Baker-Nunn Schmidt camera +79 27 25.51 +29 21 39.0 1927 S 08/1958+; Smithsonian Aph. Obs. tel.
1.04-m Zeiss Cassegrain/Coudé reflector 1972+
56-cm Cox-Hargreaves Newtonian/Cassegrain reflector 1968+
52-cm Cox-Hargreaves-Thompson reflector
38-cm Fecker reflector 1961+
25-cm Cooke refractor
15-cm Zeiss reflector 1960+
46-cm coelostat
25-cm Cox-Hargreaves off-axis Cassegrain telescope 1966+
25/25-cm Czerny-Turner horizontal spectrograph

Vainu Bappu Observatory, Indian Institute of Astrophysics, Kavalur, Alangayam (N.A.), Tamil Nadu 635 701, India

2.3-m Vainu Bappu equatorial reflector +78 49 34.8 +12 34 34.8 725 A 10/1985+
1.02-m Zeiss reflector 1972+
75-cm reflector 1980+
60/45-cm Schmidt reflector 1985+
40-cm reflector 1985+
38-cm reflector 1968+
small telescope 1967-1972

INDONESIA

Bosscha Observatory, Bandung Institute of Technology, Lembang 40391, Java, Indonesia

12.7-cm meridian circle +107 36 57.6 -6 49 32.0 1300 G From Melbourne Obs.
61-cm Zeiss double refractor +107 36 57.6 -6 49 32.0 1300 G 1928+
51/71-cm UNESCO Schmidt camera +107 36 57.6 -6 49 32.0 1300 G 1960+
37-cm Bamberg refractor +107 36 57.6 -6 49 32.0 1300 G 1927+
15-cm Secrétan telescope +107 36 54.7 -6 49 32.1 1300 A Former
12.7-cm Zeiss telescope +107 36 54.4 -6 49 32.1 1300 A

18-cm Merz telescope	+107 36 58.9	-6 49 35.3	1300	A	Destroyed 1951+
12-cm visual refractor					
45-cm photometric telescope	+107 36 54.75	-6 49 32.1	1300	A	1989+

IRELAND

Dunsink Observatory, Castleknock, Dublin 15, Ireland

38-cm With/Grubb Newtonian reflector	-6 20 13.35	+53 23 17.6	96	EU	1888-1921; refitted to 71-cm
71-cm Cassegrain reflector	-6 20 13.35	+53 23 17.6	96	EU	1955-1964; refitted from 38-cm; former
16-cm Pistor-Martin meridian circle	-6 20 14.36	+53 23 17.8	85	EU	1868-1927; former
30-cm Cauchoix-Grubb equatorial refractor	-6 20 09.32	+53 23 16.8	85	EU	1868+
10.5-cm Ramsden transit instrument	-6 20 14.36	+53 23 17.8	85	EU	1785-c.1870; former
10-cm Ramsden-Berge meridian circle	-6 20 14.64	+53 23 17.8	87	EU	1809-1840; D=2.44-m; former
R=1.02-m Bird quadrant	-6 20 14.64	+53 23 17.8	87	EU	1797-?; from Royal Greenwich Obs.; former
35-cm solar tower Cassegrain reflector	-6 20 14.64	+53 23 17.8	93	EU	1949-1970; has 40-cm coelostat; former
13-cm Sharp equatorial refractor	-6 20 13.35	+53 23 17.6	96	EU	c.1834-1885; former
5-cm portable Tulley equatorial telescope					

ISRAEL

The Florence and George Wise Observatory, Ramat Aviv, Tel Aviv University, Ramat Aviv, Tel Aviv 69978, Israel					
1.02-m Boller & Chivens Cassegrain reflector	+34 45 48	+30 35 45	874	G	06/1971+

ITALY

Arcetri Astrophysical Observatory, Florence University, Largo Enrico Fermi 5, I-50125 Florence, Italy

36-cm Amici equatorial refractor	+11 15 19.20	+43 45 14.4	184	A	
Perratoner equatorial telescope	+11 15 19.5	+43 45 14.4	184	A	Former
18-cm Regia Marina equatorial telescope	+11 15 19.5	+43 45 14.4	184	A	Former
30-cm solar tower telescope					1924+
40-cm Bamberg telescope					Former
25-cm Schmidt reflector					Former
52-cm telescope					Former
9-cm meridian circle	+11 15 19.5	+43 45 14.4	184	A	1966-?; former
5.03-m radio antenna	+11 15 19.5	+43 45 14.4	184	A	1966-?; former
1.22-m radio dish					

Asiago Astrophysical Observatory, Padua University, Via dell'Osservatorio 8, I-36012 Asiago, Italy

1.22-m Newtonian/Cassegrain reflector	+11 31 42.9	+45 51 44.7	1045	A	1942+
50/40-cm Schmidt reflector	+11 31 42.9	+45 51 44.7	1045	A	Former; to Mt. Ekar Obs.
67/92-cm Schmidt reflector	+11 31 36.00	+45 51 40	1060	A	1967+; Padua Obs. telescope

Bologna University Observatory , Bologna University, Via Zamboni 33, I-40126 Bologna, Italy 1.52-m Ritchey-Chrétien equatorial reflector 60-cm Zeiss Cassegrain reflector	+11 20 12	+44 15 32	785	G 1975+
	+11 20 04	+44 15 23	795	G 11/1936+
Brera-Milan Astronomical Observatory-Merate , Via E. Bianchi 46, I-22055 Merate, Italy OPL #32 Danjon astrolabe 1.00-m Zeiss Newtonian/Cassegrain reflector 48.7-cm Schiaparelli Merz-Repsold refractor 1.37-m Ruths Cassegrain reflector	+9 25 42.54	+45 41 57.5	340	A 10/1969+
	+9 25 42	+45 41 55.5	340	U 1929+
	+9 25 42.7	+45 41 54.1	380	A 1936+
	+9 25 42	+45 41 57.0	340	U 1968+
Brera-Milan Astronomical Observatory-Milan , Via Brera 28, I-20121 Milan, Italy 21.8-cm refractor 15.6-cm Merz refractor 48.7-cm Schiaparelli Merz-Repsold refractor 20-cm Merz refractor 95-mm Ertel meridian circle 1-m Zeiss reflector 55-mm Bamberg transit instrument Canivet transit instrument R=1.83-m Canivet mural quadrant R=1.22-m Sisson equatorial sector Dollond-Megele transit instrument R=2.44-m Ramsden mural quadrant D=91-cm Reichenbach vertical repeating circle Reichenbach transit instrument 10-cm Starke/Reichenbach-Utz. meridian circle 30-cm Amici reflector	+9 11 27	+45 28 00.6	146	A
	+9 11 27	+45 28 00.6	146	A
	+9 11 27	+45 28 00.6	146	A ?-1936; to Brera-Milan Obs., Merate
	+9 11 24	+45 28 22	149	EU
				1763-c.1775
				1768-c.1840
				1775-1862; O=10-cm
				1775-1812
				1791-1840; O=76-mm
				1809-1850; O=81-mm
Cagliari Astronomical Observatory , Via Ospedale 72, I-09124 Cagliari (Sardinia), Italy 8-cm visual zenith tube 25-cm photographic zenith tube Danjon astrolabe Doppler station 50-cm SLR Cassegrain/Coudé telescope	+8 58 37.1	+39 08 12.4	205	A 1979-1984
	+8 58 37.50	+39 08 11.9	206	A 1980+
	+8 58 37.71	+39 08 12.5	204	A 1981-1984
	+8 58 25.98	+39 08 12.3	195	E1 1980+
Capodimonte Astronomical Observatory , Via Moiairiello 16, I-80131 Naples, Italy 9-cm Bamberg transit instrument 16-cm meridian circle 30-cm equatorial reflector 21-cm equatorial refractor 13.5-cm Merz refractor 18-cm Fraunhofer equatorial refractor 8-cm zenith telescope 11.5-cm Reichenbach transit instrument 83-mm Reichenbach-Utz./Fraunhofer equat. refractor 10.8-cm Reichenbach meridian circle	+14 15 18.15	+40 51 46.3	150	A
	+14 15 18.66	+40 51 47.1	150	A
	+14 15 14.47	+40 51 45.7	154	A
	+14 15 17.62	+40 51 45.7	154	A
	+14 15 24	+40 51 53	164	EU
				1817-?
				1817-?
				1814-?
				1814-?

Catania Astrophysical Observatory, Catania University, Viale Andrea Doria 6, Città Universitaria, I-95125 Catania (Sicily), Italy

15-cm Cooke equatorial refractor	+15 05 09	+37 30 13.3	47	A ?-1956; former
32-cm Steinheil equatorial refractor				Former
33/21-cm equatorial photovisual telescope				Former
prominence coronagraph				Former
15-cm refractor #1				
15-cm refractor #2				

Chaonis Observatory, Via Zara 20, I-33083 Chions (Pordenone), Italy

60-cm Wright Schmidt reflector	+12 42 42.1	+45 50 36.5	15	A 1985+
40-cm Cassegrain/Newtonian reflector	+12 42 42.1	+45 50 36.5	15	A 1977-?; former
20-cm Schmidt/Cassegrain reflector	+12 42 42.1	+45 50 36.5	15	A 1977+
12-cm astrograph	+12 42 42.1	+45 50 36.5	15	A 1977+

Collurania Astronomical Observatory, Via Vicerale, I-64100 Teramo, Italy

50-cm Askania equatorial reflector	+13 44	+42 39 30	388	A ?-1992
39.4-cm Cooke equatorial refractor	+13 44	+42 39 27	408	A
20-cm Zeiss equatorial astrographic refractor	+13 44	+42 39 30	372	A

16.5/8-cm Cooke double photographic camera
75-mm Repsold transit instrument
Troughton & Simms zenith telescope

Damecuta Observatory, I-80071 Anacapri, Italy

35-cm domeless Zeiss Coudé refractor	+14 11 45	+40 33 30	137	U 1965+
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International Latitude Observatory, Carloforte (Sardinia), Italy

Dollond telescope	+8 18 43.5	+39 08 09.0	22	U Former
10.8-cm Wanschaff visual zenith tube	+8 18 44.0	+39 08 08.9	20	A 1899-1987
12-cm transit telescope	+8 18 44.0	+39 08 09.0	20	A 1989+
coronagraph				

Medicina Radio Astronomy Observatory, Radio Astronomy Institute, Localita Aia Cavicchio, Via Fiorentina, I-40059 Medicina, Italy

32-m steerable paraboloid	+11 38 42.35	+44 31 12.0	44	G
1200x30-m Mills Cross T-shaped array	+11 38 43	+44 31 14	41	U 1968+

Mount Ekar Observatory, Padua University, Via dell'Osservatorio 8, I-36012 Asiago, Italy

1.82-m Copernicus Cassegrain reflector	+11 34 16.9	+45 50 36.2	1350	A 03/1973+
50/40-cm Schmidt reflector	+11 34 16	+45 50 36	1350	A 1981+; from Asiago Aph. Obs.

Padua Astronomical Observatory, Vicolo dell'Osservatorio 5, I-35122 Padua, Italy

Bamberg transit instrument	+11 52 17.2	+45 24 01.3	38	U
Starke equatorial tower telescope	+11 52 19.3	+45 24 01.3	62	U
11.7-cm Starke altazimuth refractor	+11 52 09	+45 24 10	32	EU
18.7-cm Dembowski equatorial refractor	+11 52 07	+45 24 10	17	EU
84-mm Fraunhofer telescope #1	+11 52 19.6	+45 24 01.3	32	U
84-mm Fraunhofer telescope #2	+11 52 19.3	+45 24 01.3	32	U
R=2.44-m Ramsden mural quadrant				1779-?; O=76-mm

10-cm Reichenbach transit instrument
10-cm Starke meridian circle

1810-?
1837-?

Palermo University Astronomical Observatory, Palermo University, Palazzo dei Normanni, I-90134 Palermo (Sicily), Italy

25-cm Merz equatorial refractor +13 21 30 +38 06 44 72 A
12-cm meridian circle +13 21 30 +38 06 44 72 A
7-cm transit instrument +13 21 30 +38 06 44 72 A
8-cm Wanschaff zenith tube
1.52-m Ramsden vertical circle
76-mm Ramsden altazimuth circle
76-mm Ramsden transit instrument
76-mm Troughton equatorial refractor

1790-1859
1790-1859
1804-1894

Rome Observatory, Viale del Parco Mellini 84, I-00136 Rome, Italy

85-mm Bamberg reversible transit instrument +12 27 07.65 +41 55 19.2 152 A 1968+
39-cm Steinheil-Cavignato equatorial refractor +12 27 13 +41 55 25 153 EU
17-cm astrographic refractor +12 27 12 +41 55 25 152 EU
15.5-cm Cauchoix-Cavignato refractor +12 27 13 +41 55 25 153 EU
11.2-cm equatorial telescope +12 27 11.5 +41 55 18.8 152 U
9-cm equatorial¹ telescope +12 27 11.5 +41 55 18.8 152 U

25-cm equatorial telescope
15-cm horizontal camera with coelostat
Schmidt reflector
22-cm meridian circle
10-cm meridian circle
45-cm solar telescope

1951+

San Vittore Observatory, Via San Vittore 44, I-40136 Bologna, Italy

45-cm Newtonian reflector +11 20 30.4 +44 28 04.5 280 G 1969+
25/32/61-cm Schmidt camera +11 20 30.4 +44 28 04.5 280 G 1981+
11-cm astrograph +11 20 30.4 +44 28 04.5 280 G 1969-1981

Stellar Station, Catania Astrophysical Observatory, Viale Andrea Doria 6, Città Universitaria, I-95125 Catania (Sicily), Italy

91-cm Cassegrain/Newtonian spar reflector +14 58 25.5 +37 41 30.1 1735 G 1965+
30-cm Cassegrain reflector #1 +14 58 30 +37 41 32.6 1728 G
30-cm Cassegrain reflector #2 +14 58 30 +37 41 32.6 1728 G
61/41-cm Schmidt/quasi-Cassegrain reflector +14 58 24 +37 41 31.8 1732 G
33-cm Steinheil refractor +14 58 24 +37 41 31.8 1732 G

Trieste Astronomical Observatory, Via G.B. Tiepolo 11, C.P. Succursale Trieste 5, I-34131 Trieste, Italy

1-m Cassegrain reflector +13 52 31 +45 38 28 400 A 1975+
50-cm Zeiss Newtonian reflector +13 45 +45 38 400 U 1967+; Basovizza station
30-cm Cassegrain reflector +13 45 +45 38 400 U 1967+; Basovizza station
25-cm Reinfelder-Hertel equatorial refractor #1 +13 46 13.5 +45 38 35.6 74 A ?-1939
25-cm Reinfelder-Hertel equatorial refractor #2 +13 46 13.5 +45 38 35.6 78 A 1945+
16-cm Steinheil equatorial refractor +13 46 31.5 +45 38 45 79 EU
16-cm Troughton & Simms meridian circle
81-mm Heyde transit instrument

D=10-m VHF/UHF equatorial parabolic radio telescope +13 45 +45 38 400 U 1969+; Basovizza station
 B=73-m EW interferometer 1970+; at Basovizza station
 dihedral fixed antenna VHF radio telescope 1967+; at Basovizza station

Turin Astronomical Observatory, Strada dell'Osservatorio 20, I-10025 Pino Torinese, Italy

1.05-m astrometric reflector +7 46 29.2 +45 02 16.3 622 A 1974+
 10-cm Bamberg photoelectric reversible transit telescope +7 46 37.74 +45 02 20.9 610 A 1980+
 30-cm Merz-Cavignato equatorial refractor +7 46 34.5 +45 02 17.6 622 EU Inactive
 13-cm Zeiss photographic refractor +7 46 35.8 +45 02 21.0 618 EU
 10-cm Dollond refractor +7 46 33 +45 02 18 620 A 1912-?; inactive
 20-cm Zeiss astrograph +7 46 35.8 +45 02 21.0 618 A 1921+
 46-cm Cassegrain reflector +7 46 34.50 +45 02 17.6 622 A 1971+
 38/42-cm photovisual triple refractor +7 46 33.0 +45 02 18 620 A 1978+
 25-cm Cassegrain reflector +7 46 29.25 +45 02 16.3 622 A 1974+
 20-cm equatorial photographic telescope +7 46 29.25 +45 02 16.3 622 A 1990+
 10-cm meridian circle Inactive
 16-cm equatorial refractor Inactive

JAPAN

Dodaira Observatory, Togikawa, Hiki, Saitama 355-03, Japan

91-cm Cassegrain reflector +139 11 46.8 +36 00 10.2 879 TO
 50-cm Baker-Nunn camera +139 11 43.16 +36 00 08.6 856 TO From Natl. Ast. Obs., Mitaka
 , laser satellite tracker +139 11 42.00 +36 00 08.7 855 TO
 20-cm polar tube +139 11 38.30 +36 00 15.5 860 TO
 10-cm refractor
 50-cm Cassegrain reflector
 50-cm Schmidt camera
 3.8-m reflector
 lunar laser ranging (LLR) system

Fujigane Station, Nagoya University, 3-13 Honohara, Toyokawa, Aichi 442, Japan

100x20-m cylindrical parabolic antenna +138 36 42 +35 25 36 1015 G 1980+; 256-dipole array

Hida Observatory, Kyoto University, Kamitakara, Gifu 506-13, Japan

65-cm Zeiss refractor +137 18 29.21 +36 14 56.2 1276 TO
 60-cm Tsugami reflector +137 18 28.19 +36 14 58.7 1286 TO
 60-cm domeless Zeiss telescope +137 18 33.98 +36 14 55.3 1292 TO

Hiraaiso Solar Terrestrial Research Center, Communications Research Laboratory, 3601 Isozaki-machi, Nakaminato, Ibaraki-ken 311-12, Japan

10-m equatorial paraboloid +140 37 31 +36 21 58 27 TO 1988+
 6-m equatorial paraboloid +140 37 31 +36 21 58 27 TO 1975+
 1.1-m altazimuth paraboloid +140 37 31 +36 21 58 27 TO 1981+
 10-m altazimuth paraboloid +140 40 00 +35 57 12 25 TO 1980+
 10-m equatorial paraboloid +140 37 31 +36 21 58 27 TO 1970+

Kagoshima Space Center, University of Tokyo, Institute of Space and Aeronautical Science, 4-6-1 Komaba, Meguro-ku, Tokyo 153, Japan

60-cm Gregorian reflector	+131 04 02.59	+31 13 43.7	228	TO
satellite/rocket telemetry station	+131 04 45	+31 15 00	180	TO
1.2-m paraboloid				

Kashima Space Communications Center, Communications Research Laboratory, 893-1 Hirai, Kashima, Ibaraki-ken 314, Japan

26-m altazimuth parabolic antenna	+140 39 57.83	+35 57 03.2	45	TO
30-m altazimuth paraboloid				
yagi antenna				

Kiso Observatory, Mitake-mura, Kiso-gun, Nagano-ken 397-01, Japan

1.05/1.50-m Nikon Schmidt/Cassegrain equatorial reflector	+137 37 42.2	+35 47 38.7	1130	TO 1976+
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Kwasan Observatory, Kyoto University, Yamashina, Kyoto 607, Japan

45-cm Zeiss refractor	+135 47 36.15	+34 59 40.1	221	A
18-cm Zeiss-Xartorius equatorial refractor	+135 47 33	+34 59 40	222	U 1910+
30-cm Cooke equatorial refractor	+135 47 33	+34 59 40	222	U Inactive
10-cm refractor	+135 47 33	+34 59 40	222	U Inactive
25-cm reflector	+135 47 33	+34 59 40	222	U Inactive
30-cm reflector	+135 47 33	+34 59 40	222	U Inactive
8-cm refractor	+135 47 46	+34 59 26	234	U Inactive
13-cm reflector	+135 47 45	+34 59 25	228	U Inactive
12.7-cm cometseeker	+135 47 46	+34 59 26	234	U Inactive
70-cm Nishimura coelostat				Inactive
33-cm reflector				Inactive
17-cm triplet telescope				Inactive
9-cm Askania transit instrument				Inactive
20-cm coelostat				Inactive
60-cm Cassegrain reflector				Former; to Hida Obs.
30-cm coelostat				

Kyoto University Astronomy Dept. Observatory, Kyoto University, Dept. of Astronomy, Oiwake-cho, Kitashirakawa, Sakyo-ku, Kyoto 606, Japan

40-cm Cassegrain reflector	+135 47 09.6	+35 01 39.0	86	TO 1980+
20-cm cometseeker	+135 46 45	+35 01 37	55	A Former
15-cm reflector	+135 47 10.0	+35 01 39.0	82	TO 1980+
76-mm reflector	+135 46 45	+35 01 37	55	A Former
17-cm reflector	+135 46 45	+35 01 37.1	55	A Former
60-cm reflector	+135 57 21	+34 28 02	389	TO 1987+; Ouda station
40/70-cm Schmidt camera	+135 57 21	+34 28 02	389	TO Former; Ouda station

Kyoto University Physics Dept. Observatory, Kyoto University, Department of Physics, Oiwake-cho, Kitashirakawa, Sakyo-ku, Kyoto 606, Japan

40-cm reflector	+135 47 13.1	+35 01 41.8	80	TO 1971+
1.02-m reflector	+137 37 00.0	+35 47 00	1050	TO 1973+; near Agenmatsu

Mizusawa Astrogeodynamics Observatory, National Astronomical Observatory, 2-12 Hoshigaoka-machi, Mizusawa, Iwate-ken 023, Japan

20-cm Kogaku photographic zenith telescope #1	+141 07 51.90 +39 08 03.3	61	A	1955-1975
25-cm photographic zenith telescope #2	+141 07 52.88 +39 08 03.2	64	A	1975+
10-cm Danjon astrolabe	+141 07 54.05 +39 08 03.5	61	A	1964-1984
11-cm Askania-Bamberg visual zenith tube	+141 07 46.5 +39 08 03.4	61	U	1926-1986
20-cm Seisakusho coelostat				
15-cm Kogaku equatorial telescope				1939-1987
17.8-cm Cookson floating zenith telescope				1898-1927
10.8-cm Wanschaff visual zenith telescope				
9-cm transit instrument				
8-cm transit instrument				

Nagoya University Radio Astronomy Laboratory, Nagoya University, Department of Astrophysics, Furo-cho, Chikusa-ku, Nagoya 464, Japan

B=16.4-m 8-element solar interferometer +136 58 24 +35 08 51 75 TO Eight 40-cm paraboloids

National Astronomical Observatory, University of Tokyo, 2-21-1 Osawa, Mitaka-shi, Tokyo 181, Japan

20-cm photographic zenith tube	+139 32 29.03 +35 40 20.7	58	A	
20-cm Gautier meridian circle	+139 32 26.70 +35 40 19.4	61	A	1903+
65/38-cm Zeiss equatorial photographic refractor	+139 32 23.8 +35 40 15.7	68	TO	
10-cm monochromatic heliograph	+139 32 28.9 +35 40 12.5	60	TO	
20-cm Zeiss cometseeker	+139 32 29.7 +35 40 25	57	U	
20-cm Zeiss refractor	+139 32 36.3 +35 40 17	57	U	
9-cm refractor	+139 32 30 +35 40 25	57	U	
11-cm refractor	+139 32 34.5 +35 40 16	57	U	
12-cm portable refractor	+139 32 36 +35 40 16	57	U	
55-cm refractor	+139 32 33 +35 40 25	57	U	
15-cm refractor	+139 32 35.25 +35 40 12	57	U	
10-cm portable refractor	+139 32 30 +35 40 21	57	U	
87-mm portable refractor	+139 32 36 +35 40 17	57	U	
50-cm SAO Baker-Nunn camera	+139 32 28.22 +35 40 11.1	60	TO	Smithsonian Aph. Obs. instrument
19-cm Zeiss photoelectric meridian circle				1982+
48-cm solar tower telescope				Inactive
13-cm transit instrument				
9-cm transit instrument				
30-cm astrogaph				
20.3-cm Brashear astrographic refractor				
12.8-cm Steinheil equatorial refractor				
16.2-cm Merz equatorial refractor				
14-cm monochromatic heliograph				
30-cm reflector				
6-m altazimuth parabolic radio telescope	+139 32 14.6 +35 40 19.7	65	TO	
10-m parabolic radio antenna	+139 32 24.3 +35 40 18.2	70	U	
80-cm paraboloid				
1.1-m paraboloid				
24-m spherical radio reflector				

Nobeyama Cosmic Radio Observatory , 1419 Nobeyama, Minamimaki-mura, Minamisaku-gun, Nagano-ken 384-13, Japan		
45-m radio telescope	+138 29 +35 56	1350 U
5-element interferometer	+138 29 +35 56	1350 U Five 10-m telescopes
Nobeyama Solar Radio Observatory , 1419 Nobeyama, Minamimaki-mura, Minamisaku-gun, Nagano-ken 384-13, Japan		
45-m radio telescope	+138 28 46 +35 56 19	1350 TO
B=2.33x1.44-km compound interferometer	+138 28 46 +35 56 19	1350 TO 1970+
B=19-m multi-correlator interferometer	+138 28 46 +35 56 19	1350 TO
Norikura Solar Observatory , Mount Norikura, Azumi-mura, Nagano 390-15, Japan		
10-cm Lyot coronagraph	+137 33 19.2 +36 06 49.5	2876 TO 1950+
25-cm Coudé coronagraph	+137 33 21 +36 06 50	2871 TO 1972+
10-cm infrared coronagraph		1989+
Okayama Astrophysical Observatory , Kamogata-cho, Asakuchi-gun, Okayama-ken 719-02, Japan		
1.88-m Grubb-Parsons reflector	+133 35 47.29 +34 34 26.1	372 TO 1960+
91-cm Nikon Cassegrain reflector	+133 35 46.6 +34 34 22.8	365 TO
64-cm Nikon Coudé reflector	+133 35 46 +34 34 18	350 TO
Sendai Astronomical Observatory , 1-1, Sakuragaoka-koen, Sendai 980 MZ, Japan		
41-cm equatorial Newtonian/Cassegrain reflector	+140 51 56 +38 15 22	45 TO 1979+
25-cm reflector		Former
8-cm transit instrument		Former
20-cm domeless solar telescope		1982+
10-cm prominence telescope		
20/20-cm twin astrophot	+140 46 57 +38 15 44	U Ayasi station
11-cm sky patrol camera	+140 46 57 +38 15 44	U Ayasi station
Simosato Hydrographic Observatory , Japan Hydrographic Department, Simosato, Nachikatsuura-cho, Higashimuro-gun, Wakayama-ken 649-51, Japan		
62-cm Cassegrain reflector	+135 56 22.69 +33 34 27.0	63 TO 03/1981+
30-cm reflector	+135 56 24.86 +33 34 23.8	59 TO Former
15-cm refractor	+135 56 24.83 +33 34 23.8	59 U
20-cm reflector		
satellite laser ranging (SLR) system	+135 56 23.54 +33 34 27.5	62 TO 04/1982+
NNSS antenna	+135 56 23.04 +33 34 27.1	68 TO 01/1981+
Sirahama Hydrographic Observatory , Japan Hydrographic Department, Sirahama 3347, Simoda, Sizuoka-ken 415, Japan		
40-cm Cassegrain reflector	+138 59 20.39 +34 42 46.7	172 TO 03/1985+
60-cm Cassegrain reflector	+138 59 20.4 +34 42 46.6	172 TO 12/1976-12/1983
20-cm reflector	+138 59 20.4 +34 42 46.6	172 TO 04/1969+
30-cm reflector	+138 59 21.38 +34 42 46.0	173 TO 08/1965-03/1969
30-cm reflector	+138 59 20.4 +34 42 46.6	172 TO 04/1969-12/1976; 01/1984-02/1985
25-cm reflector	+138 59 21.4 +34 42 46.0	172 TO ?-11/1967
20-cm reflector	+138 59 21.4 +34 42 46.0	172 TO 05/1968-03/1969
20-cm reflector	+138 59 19.7 +34 42 41.8	91 TO 12/1967-05/1968
15-cm refractor	+138 59 21.4 +34 42 46.0	172 TO 05/1965-03/1969
10-cm refractor	+138 59 20.4 +34 42 46.6	172 TO

Sugadaira Station, Nagoya University , 3-13 Honohara, Toyokawa, Aichi 442, Japan 100x20-m cylindrical parabolic antenna	+138 19 16 +36 31 12	1280	G 1980+; 256-dipole array
Tohoku University Observatory , Tohoku University, Astronomical Institute, Aramaki Aza Aoba, Aoba-ku, Sendai, Miyagi 980, Japan transit instrument 13-cm refractor	+140 50 33.39 +38 15 26.1 +140 52 15 +38 15 15	153 20	TO 1977+ U ?-1976
Tokyo Hydrographic Observatory , Japan Hydrographic Department, 5-3-1 Tsukiji, Chuo-ku, Tokyo 104, Japan 30-cm reflector 30-cm reflector 15-cm refractor transit instrument	+139 46 10.53 +35 39 41.4 +139 46 13.02 +35 39 39.4 +139 46 10.5 +35 39 41.4 +139 46 15.85 +35 39 39.4	41 4 41 ----	TO 1976+ TO ?-12/1972 U 1973-1975 TO Former
Toyokawa Observatory , National Astronomical Observatory, 3-13 Honohara, Toyokawa, Aichi 442, Japan compound interferometer compound interferometer 10-m altazimuth paraboloid 3.0-m equatorial paraboloid 2.0-m equatorial paraboloid 1.5-m equatorial paraboloid 85-cm equatorial paraboloid	+137 22 16.84 +34 50 10.9	18	TO Array of 3-m radio dishes Array of 3-m, 2-m, 1.2-m radio dishes
Toyokawa Station, Nagoya University , Institute for Atmospheric Research, 3-13 Honohara, Toyokawa, Aichi 442, Japan 100x20-m cylindrical parabolic antenna	+137 22 09 +34 50 05	25	G c.1980+; 512-dipole array

KAZAKHSTAN

Mountain Observatory, V.G. Fesenkov Astrophysical Institute, Kamenskoje Plato, 480068 Alma-Ata, Kazakhstan
14/13-cm Zeiss photovisual double refractor
50-cm Hertz double Cassegrain reflector
50/67/12-cm Maksutov photographic telescope
80-cm Jena Ritchey-Chrétien reflector

1989+

KOREA, REPUBLIC OF

Bohyunsan Optical Astronomical Observatory, Junggak-li, Hwabuk-Myun, Youngchun-gun, Kyungpook 395-810, Republic of Korea
1.8-m Ritchey-Chrétien reflector
1.0-m automatic Cassegrain reflector
4-element solar flare telescope

+128 58 36 +36 09 59 1127 U 1995+
+128 58 36 +36 09 59 1127 U 1995+
+128 58 36 +36 09 59 1127 U 1995+; four 20-cm reflectors

Daeduk Radio Astronomy Observatory, San 36-1, Whaam-dong, Yuseong-gu, Taejeon 305-348, Republic of Korea
13.7-m radio telescope

+127 22 18.77 +36 23 53.2 120 A 1988+

Korea Astronomical Observatory, San 36-1, Whaam-dong, Yuseong-gu, Taejeon 305-348, Republic of Korea
20-cm solar refractor

+127 22 18.77 +36 23 53.2 120 A 1974+

Sobaeksan Astronomical Observatory, Daegang, Danyang-gun, Chungbuk 395-810, Republic of Korea
+128 27 22.32 +36 56 01.2 1390 A 1976+

LATVIA

Latvian State University Astronomical Observatory, Latvian State University, Boulevard Rainis 19, 226098 Riga, Latvia

8-cm refractor	+24 07 01.5	+56 57 08	39	U	Former
10-cm photoelectric transit telescope	+24 03 34.7	+56 57 00	11	A	c.1963+
20-cm refractor					Former
11-cm transit instrument					Former
65-mm transit instrument					Former
8-cm binoculars	+24 07 01.5	+56 57 08	39	U	
21-cm A.E.S. camera	+24 03 31.89	+56 56 54.9	----	S	c.1964+
25-cm A.E.S. camera	+24 03 31.68	+56 56 54.9	----	S	c.1967+
2x35-cm A.E.S. laser telescope	+24 03 29.73	+56 56 54.9	----	S	c.1972+
1.05-m A.E.S. laser telescope	+24 03 33.16	+56 56 54.6	----	S	c.1987+

Riga Radio-Astrophysical Observatory, Latvian Academy of Sciences, Ul. Turgeneva 19, 226524 Riga, Latvia

0.80/1.20-m Zeiss Schmidt reflector	+24 24	+56 47	75	U	1967+
55-cm Cassegrain reflector #1					
55-cm Cassegrain reflector #2					
10-m radio telescope					1958+

LITHUANIA

Vilnius Astronomical Observatory, Vilnius University, Čiurlionio 29, Vilnius 2009, Lithuania

equatorial refractor	+25 17 11.4	+54 40 59.1	122	U	
10-cm altazimuth telescope	+25 15 15	+54 40 59	122	U	
98-mm Plössl altazimuth telescope	+25 15 15	+54 40 59	122	U	
10-cm Ressel equatorial telescope	+25 15 15	+54 40 59	122	U	
15-cm Zeiss astrographic refractor	+25 15 15	+54 40 59	122	U	
11-cm Heyde astrographic refractor	+25 15 15	+54 40 59	122	U	
10-cm Ramsden transit instrument					1765-1807; museum
Merz heliostat					Museum
14-cm reflector					1753-?; museum
63-cm reflector					1974-1989; to Moletai Obs.
89-mm Ramsden-Dollond refractor					1770-?; museum
R=2.44-m Ramsden mural quadrant					1777-1807; O=89-mm; museum
10-cm Ramsden meridian circle					1788-?; museum
R=46-cm Reichenbach-Ertel vertical circle					1824-?; museum
Plössl refractor					c.1825-?; museum
15-cm Merz refractor					1840-?; museum
1-m reflector					1980-1989; to Mt. Maydanak Obs., Uzbekistan

MEXICO

Guillermo Haro Astrophysical Observatory, National Institute of Astrophysics, Antigua "Casa Greene", Avenida Sinaloa 25, Cananea (SO) 84620, Mexico
2.11-m Ritchey-Chrétien reflector -110 22 58.12 +31 03 10.2 2480 G 10/1986+

National Astronomical Observatory-Ensenada, National University of Mexico, Apartado Postal 877, Ensenada (BC) 22860, Mexico
2.12-m Ritchey-Chrétien reflector -115 27 47 +31 02 38 2830 U 07/1979+
1.5-m Johnson infrared photometric Cass. reflector 1970+; Univ. of Arizona telescope
84-cm Ritchey-Chrétien reflector 1972+

National Astronomical Observatory-Tonantzintla, Institute of Astronomy-UNAM, Apartado Postal 70-264, Mexico (DF) 04510, Mexico
1-m Cassegrain reflector -98 18 50 +19 01 57.9 2150 U 1961+
65/75-cm Perkin-Elmer Schmidt telescope
30.5-cm Carte du Ciel refractor
1.14-m paraboloid

NETHERLANDS

Catholic University Astronomical Institute, Catholic University, Toernooiveld, NL-6525 ED Nijmegen, Netherlands
40-cm Cassegrain reflector +5 52 07 +51 49 31 62 G
20-cm visual refractor +5 52 11 +51 49 26 73 G

Dwingeloo Radio Observatory, Postbus 2, NL-7990 AA Dwingeloo, Netherlands
25-m altazimuth parabolic reflecting antenna +6 23 48.71 +52 48 46.7 25 G 1956+ Two 7.5-m radio telescopes
2-element interferometer
3.5-m equatorial radio telescope
0.8-m equatorial radio telescope
10-m radio dish Former

Kapteyn Observatory, Mensingheweg 20, NL-9301 KA Roden, Netherlands
60-cm Nasmyth Cassegrain reflector +6 26 36.9 +53 07 44.3 12 EU 1965+

Leiden Observatory, Leiden National University, P.O. Box 9513, NL-2300 RA Leiden, Netherlands
30-cm photographic refractor +4 29 06.1 +52 09 20.5 12 A
46-cm Zunderman reflector +4 29 00.9 +52 09 20.6 12 A 1937+
25-cm refractor +4 29 03.0 +52 09 20.1 12 A
30-cm reflector +4 29 03 +52 09 19.7 12 A
15-cm Merz visual refractor +4 29 06 +52 09 20 15 EU
18-cm refractor +4 29 09 +52 09 21 18 EU
16-cm Pistor-Martin meridian circle 1861+
34/15-cm photovisual double refractor 1897+
20-cm visual telescope 1897+
26.6-cm Clark-Repsold visual refractor 1885+
16-cm Schröder visual telescope
9-cm Zeiss-Tanschaff zenith telescope 1893+
10-cm Cooke/Troughton & Simms azimuth instrument 1930+

10.4/10.4-cm twin Zeiss-Tessar camera 1924+
 75-mm Pistor-Martin transit instrument 1869+
 44-mm Ertel transit instrument
 3-cm Pistor-Martin universal instrument 1858+
 38-mm Ertel universal instrument
 54-mm Sartorius universal instrument
 8-cm Zeiss visual telescope
 45-cm Kleibrink Newtonian reflector

Simon Stevin Observatory, Bovenstraat 89, NL-4741 SK Hoeven, Netherlands

32-cm Maksutov telescope +4 33 48 +51 34 02.5 9 G
 12.7-cm equatorial refractor
 35-cm Celestron Schmidt/Cassegrain telescope
 10-cm refractor
 40-cm heliostat
 20-cm Schmidt/Cassegrain reflector
 15-cm Maksutov telescope 1980+
 17.8-cm satellite camera ?-1980
 50-cm astrocamera
 10-cm astrocamera
 8-cm cometseeker
 7.5-m radio telescope 05/1974+
 4-m radio telescope 05/1974+

Sonnenborgh Observatory, Zonnenburg 2, NL-3512 NL Utrecht, Netherlands

14.5-cm solar tower telescope with coelostat +5 07 45.1 +52 05 09.6 14 A 1936+
 26-cm Merz equatorial refractor +5 07 45.1 +52 05 09.6 14 A c.1880+
 12-cm Utzschneider-Fraunhofer equatorial refractor +5 07 45.1 +52 05 10.2 14 A ?-1986; from Utrecht Univ. Obs.
 40-cm reflector ?-1970; to Stephanion Obs.
 8-cm Troughton & Simms meridian instrument ?-1960

Westerbork Radio Astronomy Observatory, Schattenberg 1, NL-9433 TA Zwiggelte, Netherlands

14-element synthesis radio telescope +6 36 15 +52 55 00.9 16 U 1970-1980 as 12-element telescope; 1980+

NEW ZEALAND

Auckland Observatory, Box 24-180, Auckland 6, New Zealand

50-cm Zeiss Newtonian/Cassegrain reflector +174 46 39 -36 54 25.7 80 NZ
 15-cm Zeiss reflector +174 46 37.9 -36 54 28 80 NZ
 20-cm reflector +174 46 37.9 -36 54 28 80 NZ

Black Birch Station, Carter Observatory, P.O. Box 770, Blenheim, New Zealand

41-cm Crisp Boller & Chivens Schmidt/Cass. reflector +173 48 13.04 -41 44 55.9 1396 NZ 06/1978+; from Carter Obs.
 10-cm astrograph

Carter Observatory, P.O. Box 2909, Wellington 1, New Zealand

41-cm Crisp Boller & Chivens Schmidt/Cass. reflector	+174 46 00.71	-41 17 09.7	129	NZ ?-06/1978; to Black Birch Station
23-cm Cooke equatorial photovisual triple reflector	+174 46 01.05	-41 17 09.4	129	NZ 1941+
20-cm portable Schmidt/Cassegrain reflector #1	+174 46 01.1	-41 17 09.6	127	NZ
20-cm portable Schmidt/Cassegrain reflector #2	+174 46 01.1	-41 17 09.6	127	NZ
89-mm portable Questar reflector	+174 46 01.1	-41 17 09.6	127	NZ
15-cm Cooke reflector	+174 46 00.71	-41 17 09.7	129	NZ 1982+
12.7-cm refractor	+174 46 03.3	-41 17 10.6	134	NZ, Royal Ast. Soc. of New Zealand tel. (T. King Obs.)
76-mm portable refractor (5)				1950+

Mount John University Observatory, Mount John University, P.O. Box 56, Lake Tekapo 8770, South Canterbury, New Zealand

61-cm photometric Cassegrain reflector #1	+170 27 51.70	-43 59 14.7	1027	NZ 1970+; Flower and Cook Obs. telescope
61-cm Boller & Chivens reflector #2	+170 27 51.80	-43 59 12.5	1025	NZ 1975+; Univ. of Canterbury telescope
50-cm USAF Baker-Nunn camera	+170 27 50.11	-43 59 20.2	1011	NZ ?-12/1983; satellite tracking sta.; U.S. Air Force instr.
25-cm astrographic camera	+170 27 52.80	-43 59 14.4	1031	NZ 1965+; Flower and Cook Obs. telescope
10-cm astrographic camera	+170 27 52.80	-43 59 14.4	1031	NZ 1965+
12.5-cm astrographic camera	+170 27 52.80	-43 59 14.4	1031	NZ 1965+
1-m Dall-Kirkham reflector	+170 27 50.06	-43 59 20.1	1011	NZ 1986+; Univ. of Canterbury telescope
41-mm Damon sky patrol camera #1	+170 27 54.45	-43 59 14.4	1030	NZ 05/1981+; from Oak Ridge Obs.
41-mm Damon sky patrol camera #2	+170 27 54.45	-43 59 14.4	1030	NZ 05/1981+; from Oak Ridge Obs.
10-cm Bamberg patrol camera (4)	+170 27 53.60	-43 59 14.3	1033	NZ 1965+; 4 cameras on one mount

NORWAY

EISCAT Tromsø Station, European Incoherent Scatter Facility, Ramfjordmoen, N-9027 Ramfjordbotn, Norway

40x120-m VHF antenna	+19 13 13.23	+69 35 11.9	85	EU
32-m UHF dish antenna	+19 13 38.75	+69 35 11.2	87	EU

Skibotn Astronomical Observatory, University of Tromsø, N-9048 Skibotn, Norway

50.8-cm Ritchey-Chrétien reflector	+20 21 53.04	+69 20 53.0	157	EU 1979+
21-cm telescope				Former

PHILIPPINES

Manila Observatory, P.O. Box 1231, Manila 2800, Philippines

30-cm spectroheliograph	+121 04 34.50	+14 38 10.4	58	G
25-cm automated Razdow solar refractor	+121 04 34.50	+14 38 10.4	58	G
10-cm refractor	+121 04 34.50	+14 38 10.4	58	G
Cauchoux lens	+121 04 34.50	+14 38 10.4	58	G
solar radiometers	+121 04 34.50	+14 38 10.4	58	G
24-48 MHz spectrometer	+121 04 34.50	+14 38 10.4	58	G
2.44-m paraboloid	+121 04 34.50	+14 38 10.4	58	G
3.0-m paraboloid				
2-element interferometer				

Pagasa Astronomical Observatory, National Geophysical & Astronomical Service, Asia Trust Building, 1424 Quezon Boulevard, Quezon City, Philippines

30-cm Cassegrain reflector +121 04 16.2 +14 39 09.6 70 G 1984-1988; former

15-cm refractor +121 04 14.2 +14 39 09.6 70 G ?-1979

Wild T-4 transit instrument

15-cm reflector #1 Former

15-cm reflector #2 Former

20-cm Schmidt camera

DKM-3A theodolite

75-mm refractor #1 1979+

75-mm refractor #2

12-cm apogee telescope

POLAND

Astronomical Latitude Observatory, Polish Academy of Sciences, Borowiec, PL-62-035 Kornik, Poland

13-cm Zeiss visual zenith tube +17 04 30 +52 16 38.2 80 A

10-cm Zeiss visual transit telescope

10-cm Danjon astrolabe +17 04 36.56 +52 16 38 80 A

11-cm Poznan zenith telescope

50-cm Zeiss satellite camera +17 04 36.5 +52 16 38.5 80 A 1983+

satellite laser ranging (SLR) station

Doppler NNSS receiver 1988+

1983+

Bialkow Observing Station, Wroclaw University, Ul. Kopernika 11, PL-51-622 Wroclaw, Poland

60-cm Zeiss reflector +16 39 35.9 +51 28 32 140 A 1975+

53-cm coronagraph

15-cm solar horizontal telescope +16 39 35.9 +51 28 32 140 A 1981+

25-cm refractor +16 39 35.9 +51 28 32 140 A 1987+

former A c.1925-1975; former

Fort Skala Station, Jagellonian University Astronomical Observatory, Ul. Orla 171, PL-30-244 Cracow, Poland

50-cm Cassegrain reflector +19 49 34.6 +50 03 16.1 314 A

35-cm Maksutov Cassegrain reflector

81-mm Plössl refractor +19 49 40.3 +50 03 15.1 311 A

20.3-cm refractor +19 49 30 +50 03 16 316 EU

10.9-cm refractor +19 49 34.65 +50 03 16.1 314 A

11-cm refractor +19 49 34.65 +50 03 16.1 314 A

10.8-cm refractor +19 49 40.35 +50 03 15.1 311 A

20.3-cm refractor +19 49 37.35 +50 03 15.5 318 A

13.4-cm refractor +19 49 35.55 +50 03 14.6 314 A

20-cm portable refractor +19 49 35.55 +50 03 14.6 314 A

15-cm Maksutov Cassegrain telescope +19 49 38.70 +50 03 15.1 316 A

15-m radio telescope +19 49 40.35 +50 03 15.5 310 A

7-m radio telescope +19 49 45 +50 03 12 304 A

304 A

Jagellonian University Astronomical Observatory, Jagellonian University, Ul. Orla 171, PL-30-244 Cracow, Poland

20.3-cm Harvard refractor	+19 57 35.1	+50 03 52.2	225	A
11.6-cm portable Merz refractor	+19 57 34.95	+50 03 51.8	221	A
30.5-cm Kordylewski reflector	+19 57 25	+50 03 52	221	EU
14.8-cm Merz cometseeker	+19 57 35.1	+50 03 52.2	225	A
8-cm Zeiss cometseeker	+19 57 27	+50 03 52	225	EU
Binar Somet telescope	+19 57 27	+50 03 52	225	EU
83-mm transit circle	+19 57 25	+50 03 52	221	EU
11-cm Merz refractor	+19 57 35.1	+50 03 52.2	225	A
98-mm Plössl refractor	+19 57 35.1	+50 03 52.2	225	A
14-cm equatorial telescope	+19 57 35.1	+50 03 52.2	225	A
12-cm equatorial telescope	+19 57 35.1	+50 03 52.2	225	A
5-cm equatorial telescope	+19 57 35.1	+50 03 52.2	225	A
7-cm Dollond horizontal telescope	+19 57 35.1	+50 03 52.2	225	A
10.9-cm Zeiss-Heyde refractor	+19 57 27	+50 03 52	225	EU
8-cm Plössl refractor	+19 57 25	+50 03 52	221	EU
13.4-cm Steinheil cometseeker	+19 57 25	+50 03 52	225	EU
83-mm Utzschneider-Fraunhofer horizontal telescope	+19 57 27	+50 03 52	225	EU
76-mm Utzschneider-Fraunhofer cometseeker	+19 57 35.4	+50 03 52.3	225	A
20.3-cm Grubb-Merz refractor	+19 57 34.5	+50 03 51.9	225	A
11.6-cm Ertel equatorial refractor				1842-?
D=1.8-m Troughton & Simms mural circle				1832-?
84-mm Utzschneider refractor				1828-?
mural quadrant				1825+
Utzschneider equatorial circle				c.1818-?
Utzschneider meridian circle				c.1818-?
R=91-cm Canivet quadrant				1791-1829
				1783-?

Mount Suhora Observatory, Cracow Pedagogical University, Department of Physics, Ul. Podchorznych 2, PL-30-084 Cracow, Poland

60-cm Zeiss Cassegrain reflector	+20 04 00	+49 34 12	1000	U 1987+
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Piwnice Astronomical Observatory, Nicolaus Copernicus University, Sienkiewicza 30, Ul. Chopina 12/18, PL-87-100 Toruń, Poland

90/60-cm Schmidt/Cassegrain reflector	+18 33 22	+53 05 44	100	A
35-cm Schmidt camera				From Harvard College Obs.
20-cm Draper astrographic refractor				
25-cm reflector				
20-cm Zeiss refractor				
15-m radio telescope				
1.8-m solar radio telescope				
4x8-m cylindrical paraboloid #1				
4x8-m cylindrical paraboloid #2				
20-m log-periodic aerial #1				
20-m log-periodic aerial #2				
6x6x80-m 2-corner reflector with 8 dipoles				Two 2.5x2.5-m antennas
2-corner reflector with 8 wideband dipoles				Two 100-m antennas and a 200-m antenna
B=25-m interferometer				
interferometer				

Poznań University Astronomical Observatory, A. Mickiewicza University-Poznań, Sloneczna 36, PL-60-286 Poznań, Poland			
transit instrument	+16 52 44.49	+52 23 50.5	85 A
14-cm satellite camera	+16 52 44.1	+52 23 50.9	85 U
20-cm Zeiss refractor	+16 52 42	+52 23 48	85 EU 1929+
10.8-cm Reinfelder-Hertel horizontal telescope	+16 52 42	+52 23 48	85 EU
2-cm theodolite	+16 52 41.7	+52 23 54.3	85 A
10-cm Utzschneider telescope	+16 52 42	+52 23 48	85 EU
30-cm astrograph	+16 52 42.0	+52 23 48	85 EU 1986+
65-cm telescope	+16 52 42.0	+52 23 48	85 A 1989+
17-cm Zeiss Coudé reflector	+16 52 42.0	+52 23 48	85 A 1978+
12-cm double astrograph	+16 52 42.0	+52 23 48	85 A 1978+
16.2-cm Steinheil equatorial refractor	+16 52 37	+52 23 45	85 EU
11-cm Zeiss refractor	+16 52 37	+52 23 45	85 EU
6-cm Zeiss refractor	+16 52 41.7	+52 23 54.3	85 U
95-mm Merz horizontal telescope	+16 52 39	+52 23 47.7	85 U
81-mm Ertel telescope	+16 52 41.7	+52 23 54.3	85 U
10-cm binoculars	+16 52 42	+52 23 48	85 EU
satellite laser instruments	+16 52 42.0	+52 23 48	85 G 1988+
Warsaw University Astronomical Observatory, Warsaw University, Al. Ujazdowskie 4, PL-00-478 Warsaw, Poland			
60-cm Zeiss reflector	+21 25 12	+52 05 23	138 A 1973+
25-cm Grubb visual refractor			
14-cm astrographic camera			
Wroclaw University Astronomical Observatory, Wroclaw University, Ul. Kopernika 11, PL-51-622 Wroclaw, Poland			
16-cm Repsold transit circle	+17 05 18.3	+51 06 42.1	115 A c.1939-1980
20.3-cm Clark-Repsold refractor	+17 05 18.3	+51 06 42.1	125 A c.1939+
13-cm coronagraph	+17 05 18.3	+51 06 42.1	115 A 1966+
10-cm Fraunhofer refractor	+17 05 17.8	+51 06 42.0	117 A Destroyed
16-cm Steinheil-Repsold vertical circle	+17 05 18.3	+51 06 42.1	115 A c.1939-1954
Hildebrandt universal telescope	+17 05 17.8	+51 06 42.0	117 A Destroyed
55-mm Merz telescope	+17 05 17.8	+51 06 42.0	117 A Destroyed
45-mm ground telescope	+17 05 17.8	+51 06 42.0	117 A Destroyed
13-cm Reinfelder-Hertel cometseeker	+17 05 17.8	+51 06 42.0	117 A Destroyed
50-cm Schmidt reflector	+17 05 17.8	+51 06 42.0	117 A Destroyed
7-cm Dollond telescope	+17 05 17.8	+51 06 42.0	117 A Destroyed
6-cm Fraunhofer telescope	+17 05 17.8	+51 06 42.0	117 A Destroyed
6-cm Lincoln telescope	+17 05 17.8	+51 06 42.0	117 A Destroyed
8-cm Dollond telescope	+17 05 17.8	+51 06 42.0	117 A Destroyed
13-cm portable Ikon-Epikar telescope	+17 05 18.1	+51 06 40.2	124 A Destroyed
11-cm Steinheil-Gordon refractor	+17 05 18.3	+51 06 42.1	115 A c.1939+
18-cm Grubb-Parsons astrographic refractor	+17 05 18.3	+51 06 42.1	125 A

PORTUGAL

Coimbra Astronomical Observatory, Coimbra University, Caixa Postal 147, P-3002 Coimbra Codex, Portugal

No instrument given	-8 25 46.5	+40 12 24.5	99	U	
17-cm meridian circle					
13-cm equatorial telescope					
7-cm universal instrument					
40-cm coelostat					
25-cm spectroheliograph					1788-?
13.2-cm Troughton equatorial refractor					1798-?
R=1.0-m Troughton quadrant					
66-mm Dollond transit instrument					
15-cm stellar spectrograph					

Lisbon Astronomical Observatory, Tapada da Ajuda, P-1300 Lisbon, Portugal

38.2-cm Merz-Repsold equatorial refractor	-9 11 09.7	+38 42 42.4	111	EU	1864+
11.7-cm Merz-Repsold refractor	-9 11 09.1	+38 42 41.0	95	EU	1870+
13.5-cm Repsold meridian circle	-9 11 11.2	+38 42 30.5	95	A	1861+
16-cm Repsold transit instrument	-9 11 10.2	+38 42 31.0	95	A	
7-cm portable Repsold transit instrument	-9 11 09.15	+38 42 30.5	95	A	1866+
97-mm Utzschneider-Fraunhofer refractor	-9 11 09.6	+38 42 41.8	95	EU	Former
83-mm Merz refractor	-9 11 09.9	+38 42 41.8	95	EU	Former
31.8-cm Meade Newtonian reflector	-9 11 10.35	+38 42 41.0	96	EU	
20.3-cm Schmidt/Cassegrain catadioptric reflector	-9 11 09.90	+38 42 41.8	95	EU	
25.4-cm Schmidt/Cassegrain catadioptric reflector	-9 11 09.60	+38 42 41.8	95	EU	

Prof. Manuel de Barros Observatory, Porto University, Monte da Virgem, P-4400 Vila Nova de Gaia, Portugal

mirror transit circle	-8 35 17.0	+41 06 28.9	232	EU	1957+
transit instrument	-8 35 15.4	+41 06 27.0	232	EU	1954+
equatorial refractor	-8 35 14.4	+41 06 28.5	238	EU	1973+
satellite camera	-8 35 16.0	+41 06 28.3	232	EU	1971+
10-cm Maksutov telescope					
10-cm refractor	-8 35 14.4	+41 06 28.5	234	EU	1973+
7-cm refractor	-8 35 14.4	+41 06 21.0	238	U	
76-cm reflector	-8 35 16.5	+41 06 29.9	232	EU	1980+
15-cm refractor					
6-cm refractor					
5-m radio telescope	-8 13 48	+41 00 00	300	EU	1989+; Nespereire station

PUERTO RICO

Arecibo Observatory, National Astronomy and Ionosphere Center, P.O. Box 995, Arecibo, Puerto Rico 00613

305-m fixed spherical reflecting antenna	-66 45 11.1	+18 20 36.6	496	NA	1963+
30.5-m interferometric equatorial parabolic antenna	-66 43 44	+18 26 11	60	NA	1977+

ROMANIA

Bucharest Astronomical Observatory, Center for Astronomy and Space Sciences, Cutitul de Argint 5, R-75212 Bucharest, Romania

10-cm Zeiss transit telescope	+26 05 46.72	+44 24 50	81	A 1957+
19-cm Gautier-Prin meridian circle	+26 05 48	+44 24 50	81	A 1924+
75-cm AFU satellite camera	+26 05 48	+44 24 50	81	S 1970+
38/38-cm Merz-Prin twin refractor	+26 05 48.0	+44 24 50	81	A 1912+
50-cm Cassegrain reflector	+26 05 48.0	+44 24 50	81	A 1965+
13-cm Zeiss refractor	+26 05 48.0	+44 24 50	81	A 1957+
30-cm Jensch coelostat	+26 05 48.0	+44 24 50	81	A 1989+

Cluj-Napoca Astronomical Observatory, Calea Ciresilor 19, R-34000 Cluj-Napoca, Romania

50-cm Newtonian reflector	+23 35 52	+46 42 48	750	A c.1939+
20-cm Zeiss double refractor	+23 35 52	+46 42 48	750	A c.1939+
20-cm Zeiss-Vierlinger refractor	+23 35 52	+46 42 48	750	A
44-cm transit instrument				Former

RUSSIA

Engelhardt Astronomical Observatory, Observatoria Station, 422526 Kazan, Russia

14-cm meridian circle	+48 48 54.15	+55 50 20.3	98	A 1905+
38/52-cm Schmidt telescope	+48 48 51.93	+55 50 18.4	98	A 1940-1963; to Kazakhstan station
16.2-cm Merz cometseeker	+48 48 53.83	+55 50 18.4	98	A 1932+
10.6-cm heliometer	+48 48 49.24	+55 50 19.2	98	A 1908+
15-cm Zeiss astrograph	+48 48 52.42	+55 50 18.9	98	A 1957-1970
95-mm zenith telescope	+48 48 55.59	+55 50 18.2	98	A 1945+
30.6-cm Grubb refractor	+48 48 52.23	+55 50 20.3	98	A 1903-1965
18-cm zenith telescope	+48 48 55.59	+55 50 20.3	98	A 1957+
98-mm Fraunhofer telescope	+48 48 56.1	+55 50 20.2	98	A
68-mm Zeiss telescope	+48 48 56.1	+55 50 20.2	98	A
95-mm Merz cometseeker	+48 48 56.1	+55 50 20.2	98	A
48-cm Cassegrain reflector	+48 48 53.69	+55 50 19.2	98	A 1965+
40-cm Grubb refractor	+48 48 52.23	+55 50 20.3	98	A 1965+
35/51-cm Maksutov telescope	+48 48 51.93	+55 50 18.4	98	A 1963+
12-cm Zeiss astrograph	+48 48 52.42	+55 50 18.9	98	A 1929-1957
20-cm Heide astrograph	+48 48 52.48	+55 50 19.0	98	A 1914-1957
20-cm Heide astrograph	+48 48 53.57	+55 50 18.4	98	A 1957+
20-cm AFR-18 astrograph	+48 48 52.42	+55 50 18.9	98	A 1988+
20-cm horizontal telescope	+48 48 51.12	+55 50 19.7	98	A 1949+
38-cm Schmidt telescope	+76 59 30	+43 04 10	3000	U 1963-1977; former; Kazakhstan station
38-cm Schmidt telescope	+41 26 36	+43 39 10	2040	A 1977-1983; former; Caucasus mountain station
40-cm horizontal telescope	+41 26 36	+43 39 10	2040	A 1989+; Caucasus mountain station
50-cm horizontal telescope	+41 26 36	+43 39 10	2040	A 1989+; Caucasus mountain station
38-cm Schmidt telescope	+107 03 00	+47 51 56	1620	U 1986+; Mongolia station

Irkutsk Astronomical Observatory, Irkutsk State University, Sovetskaya 119A, 664009 Irkutsk, Russia

zenith telescope	+104 20 42	+52 16 43.8	468	A
broken-transit telescope	+104 20 42	+52 16 44.7	468	A
8-cm Bush refractor	+104 20 40.6	+52 16 45	468	A
10-cm portable equatorial telescope	+104 20 40.6	+52 16 45	468	A
meridian circle	+104 20 40.6	+52 16 44.4	468	A
Zeiss binoculars	+104 20 36	+52 16 44.0	468	A

Kaliningrad University Observatory, Kaliningrad State University, Ul. Universitetskaya 23, Kaliningrad, Russia

97-mm Reichenbach-Ertel meridian circle	+20 29 44.5	+54 42 50.5	24	A c.1819-?
79-mm equatorial cometseeker	+20 29 44.5	+54 42 50.5	24	A 1813-?
15-cm Fraunhofer-Utzscheider heliometer	+20 29 44.5	+54 42 50.5	24	A 1829-?
33-cm refractor	+20 29 43.6	+54 42 50.5	34	A
10-cm Plössl telescope	+20 29 43.6	+54 42 50.5	34	A
D=76-cm Cary vertical circle				1813-1819; O=5-cm
69-mm Dollond transit instrument				1813-1821
15-cm Repsold meridian circle				1841-?
61-mm Fraunhofer refractor				1851-?

Kazan University Observatory, Kazan State University, Ul. Lenina 18, 420008 Kazan, Russia

81-mm Dollond equatorial telescope	+49 07 15.4	+55 47 23.9	79	A c.1935+
24.3-cm Fraunhofer refractor	+49 07 15.4	+55 47 23.9	79	A c.1935+
81-mm Pariser cometseeker	+49 07 15.4	+55 47 23.9	79	A c.1935+
10.8-cm Kovalsky tube	+49 07 15.4	+55 47 23.9	79	A c.1935+
66-mm Dollond telescope	+49 07 15.4	+55 47 23.9	79	A c.1935+
16.2-cm cometseeker	+49 07 15.4	+55 47 23.9	79	A c.1935+
68-mm Dollond telescope	+49 07 15.4	+55 47 23.9	79	A c.1935+
68-mm Steinheil telescope	+49 07 15.4	+55 47 23.9	79	A c.1935+
Brauer transit instrument				c.1935+
Repsold vertical circle				c.1935+
10-cm cometseeker				c.1935+
81-mm Steinheil-Gauss equatorial telescope	+49 07 15.4	+55 47 23.9	79	A c.1935+
25-cm Merz & Mahler equatorial refractor				1838-?
Ertel transit instrument				c.1839-?

Kislovodsk Solar Station, Pulkovo Observatory, P.O. Box 1, 357741 Kislovodsk, Russia

53-cm Lyot coronagraph	+42 31 45	+43 44	2130	U
20-cm coronagraph				
10-cm heliograph				

Pulkovo Observatory, Russian Academy of Sciences, 65 Pulkovo, 196140 St. Petersburg, Russia

40-cm Merz & Mahler refractor	+30 19 37	+59 46 21	75	EU 1839-1941, 1954+
33/25-cm photovisual astrophotograph	+30 19 37	+59 46 21	75	EU
10-cm Ponomarev double astrophotograph	+30 19 37	+59 46 21	75	EU
Pavlov photoelectric transit instrument #1	+30 19 38.49	+59 46 00	----	A
Pavlov photoelectric transit instrument #2	+30 19 38.49	+59 46 00	----	A
14-cm Freiberg-Kondratjev zenith telescope	+30 15	+59 46 15.6	----	A 1947+
15-cm Ertel-Merz meridian instrument				1839-?

R=2.44-m	Bird mural quadrant	1752-?
	Ramsden transit instrument	1803-1807
D=1.52-m	Troughton meridian circle	1807-?
	Herschel reflector	1807-?
D=46-cm	Troughton repeating circle	1807-?

Sayan Mountains Radiophysical Observatory, Institute of Solar-Terrestrial Physics, Ul. Lermontov 126, P.O. Box 4026, 664033 Irkutsk, Russia
Siberian Solar Radio Telescope (SSRT) +102 12 30 +51 45 27 832 U 1985+; 2 arrays of 128x128 2.5-m parabolic antennas

Special Astrophysical Observatory, Nizhnij Arkhyz, Zelenchukskaya, 357147 Stavropolskij Kraj, Russia
6-m Large Altazimuth Telescope (BTA) +41 26 30 +43 39 12 2100 A 1976+
1-m Zeiss reflector
0.6-m Zeiss reflector
600-m RATAN radio telescope +41 35 25 +43 49 32 973 A 1976+

Sternberg State Astronomical Institute, Moscow University, Universitetskij Prospekt 13, 119899 Moscow, Russia
38/38-cm photovisual twin astrograph +37 32 39.9 +55 42 00.0 195 A
18-cm zenith tube +37 32 39.9 +55 42 00.0 195 A
18-cm refractor +37 32 39.9 +55 42 00.0 195 A
15-cm Repsold meridian circle +37 32 40.23 +55 42 00 ---- A 1846-1952
51/71-cm meniscus telescope

16-cm Zeiss equatorial camera
30-cm reflector
12-cm refractor
25-cm telescope
Dollond transit instrument
D=38-cm Troughton altazimuth instrument

1832-?
1832-?

Tomsk University Observatory, Tomsk State University, 3 Timiryazev Avenue, P.O. Box 1106, 634010 Tomsk, Russia
14-cm refractor +84 56 45 +56 28 07.4 130 A
13-cm refractor +84 56 45 +56 28 07.4 130 A
12-cm refractor +84 56 45 +56 28 07.4 130 A
9-cm Bamberg refractor +84 56 45 +56 28 07.4 130 A
7-cm Bamberg telescope +84 56 45 +56 28 07.4 130 A
8-cm refractor +84 56 45 +56 28 07.4 130 A
9-cm Zeiss refractor +84 57 58 +56 28 09 130 A
7-cm refractor +84 56 45 +56 28 07.4 130 A
Maksutov telescope +84 56 45 +56 28 07.4 130 A
7-cm binoculars +84 56 45 +56 28 07.4 130 A

SLOVAKIA

Lomnický Štít Coronal Observatory, Slovak Academy of Sciences, 059 60 Tatranská Lomnica, Slovakia
20-cm coronagraph +20 13 12.3 +49 11 45.6 2632 G 1962+
60-cm Cassegrain/Newtonian reflector +20 13 12.3 +49 11 45.6 2632 G Former
12-cm Maksutov camera Former

12-cm astrograph
25-cm cometseeker
10-cm refractor
20-cm coronagraph
13-cm refractor

Former
Former
Former
1971+
1970+

Skalná Pleso Observatory, Slovak Academy of Sciences, 059 60 Tatranská Lomnica, Slovakia

60-cm Zeiss equatorial Cassegrain/Newtonian reflector +20 14 41.5 +49 11 20.0 1783 A
30-cm Zeiss astrographic refractor +20 14 40.5 +49 11 20.0 1783 A
20-cm Zeiss coronagraphic refractor +20 14 41.5 +49 11 20.0 1783 A
13-cm Zeiss refractor +20 14 41.5 +49 11 20.0 1783 A
10-cm Somet binoculars +20 14 41.5 +49 11 20.0 1783 A
10-cm cometseeker
21-cm Schmidt telescope
12-cm Schmidt telescope
meteor camera

Slovak Technical University Observatory, Slovak Technical University, Ul. Radlinského C.11, 813 68 Bratislava, Slovakia

10-cm transit instrument +17 07 11.47 +48 09 18 171 A 1958+
10-cm circumzenithal telescope +17 07 11.44 +48 09 18.1 171 A 1986+

SOUTH AFRICA, REPUBLIC OF

Boyden Observatory, University of the Orange Free State, P.O. Box 339, Bloemfontein 9300, Transvaal, Republic of South Africa

1.52-m Rockefeller Cassegrain reflector +26 24 18 -29 02 18 1387 CP 1933+
81/91-cm ADH Perkin-Elmer Baker-Schmidt reflector +26 24 18 -29 02 18 1387 CP 1950-1979; former; Armagh/Dunsink/Harvard Obs. tel.
41-cm Nishimura Cassegrain reflector +26 24 18 -29 02 18 1387 CP 1966+
33-cm Boyden Clark photographic refractor +26 24 18 -29 02 18 1387 CP 1930+
25-cm Metcalf photographic triple refractor +26 24 18 -29 02 18 1387 CP 1927+
76-mm Ross-Fecker camera +26 24 18 -29 02 18 1387 CP 1933+
61-cm Bruce Clark double astrographic refractor +26 24 18 -29 02 18 1387 CP 1933-1950
20-cm Bache double photographic refractor 1933-c.1963
36-cm Hamburg Schmidt reflector c.1964-1972
50-cm Cassegrain photometric reflector c.1966-1971
40-cm Cassegrain reflector c.1965-1971; Remets Obs. telescope
20-cm Brashear photographic lens 1938-1944
38-mm Cooke photographic lens 1933+
76-cm Perkin-Zeiss photographic telescope 1952+
41-mm Damon camera 1970-1973; former

Hartebeeshoek Radio Astronomy Observatory, P.O. Box 443, Krugersdorp 1740, Transvaal, Republic of South Africa

26-m paraboloid +27 41 08.53 -25 53 21.1 1391 CP 1961+
12-m steerable parabolic antenna 1961+
minitrack interferometer system 1961-1974; NASA instrument

South African Astronomical Observatory, P.O. Box 9, Observatory 7935, Cape Province, Republic of South Africa

61-cm McClean Victoria Grubb photographic refractor	+18 28 40.9	-33 56 06.5	18	CP 1898+
46-cm Cox-Hargreaves/Thomson reflector	+18 28 42.1	-33 56 01.1	15	CP 1957+
33-cm astrophotic refractor	+18 28 42.9	-33 56 07.5	15	CP 1891+
15-cm equatorial visual refractor	+18 28 42.7	-33 56 06.8	12	CP 1886+
Askania Kine-theodolite	+18 28 43.1	-33 56 06.7	15	CP 1967-01/1981; from Royal Greenwich Obs. 1905-1973
15-cm Gill Troughton & Simms transit circle				03/1958-1972
12.7-cm automatic Lyot heliograph				A 1963-1972; to Sutherland Station 1910-01/1977
1.01-m Elizabeth Grubb-Parsons Cassegrain reflector	+18 28 40.5	-33 56 00.7	20	A
De La Rue photoheliograph				

Southern Station, Leiden Observatory, P.O. Box 13, Broederstroom 0240, Transvaal, Republic of South Africa

90-cm Cassegrain reflector	+27 52 33.2	-25 46 22.2	1220	A 1957-1978; to European Southern Obs.
41/41-cm Rockefeller twin astrophot	+27 52 34.5	-25 46 22.7	1220	A 1957-?
50-cm Calypso Cassegrain reflector	+27 52 33.8	-25 46 23.5	1220	A
25-cm Franklin-Adams photographic refractor				1954+; from Republic Obs.

Sutherland Observing Station, South African Astronomical Observatory, P.O. Box 9, Observatory 7935, Cape Province, Republic of South Africa

1.88-m Grubb-Parsons Newtonian reflector	+20 48 44.3	-32 22 43.4	1771	CP 1976+; from Radcliffe Obs.
1.01-m Elizabeth Grubb-Parsons Cassegrain reflector	+20 48 38.52	-32 22 46.3	1768	CP 1972+; from South African Ast. Obs.
50-cm Leiden Boller & Chivens Cassegrain reflector	+20 48 42.7	-32 22 46.8	1764	CP 1972+; from Republic Obs.
75-cm Cassegrain reflector	+20 48 40.6	-32 22 46.5	1766	CP 1974+; comounted with 3 reflectors
25.5-cm refractor	+20 48 40.6	-32 22 46.5	1766	CP 1974+; comounted with 75-cm reflector
20.3-cm refractor	+20 48 40.6	-32 22 46.5	1766	CP 1974+; comounted with 75-cm reflector
12.7-cm photographic refractor	+20 48 40.6	-32 22 46.5	1766	CP 1974+; comounted with 75-cm reflector

SPAIN

Deep Space Station-Cebreros, American Embassy, Madrid Space Station (DSS-62), NASA/INTA, APO New York, New York 09285

26-m parabolic S-band antenna	-4 21 59.43	+40 27 15.3	789	EU 12/1966+
64-m radio telescope	-4 14 50.87	+40 26 03.9	796	EU
34-m antenna				1987+

Deep Space Station-Robledo, Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, California 91109

26-m paraboloid	-4 14 51.72	+40 25 47.7	796	EU 1965-1980; upgraded to 34-m
34-m paraboloid	-4 14 51.72	+40 25 47.7	796	EU 1980+
26-m unified S-band antenna	-4 10 01.87	+40 27 23.9	785	EU
64-m parabolic Cassegrain antenna	-4 14 48.07	+40 25 56.6	812	EU 09/1973-1987; upgraded to 70-m
70-m parabolic Cassegrain antenna	-4 14 48.07	+40 25 56.6	812	EU 1987+
34-m radio antenna	-4 15 00.35	+40 25 42.1	782	EU 1987+
26-m radio antenna	-4 15 00.34	+40 25 52.2	798	EU 1965+

Ebro Observatory, E-43520 Roquetas (Tarragona), Spain

2.4-m equatorial paraboloid	+0 29 33	+40 49 13.5	50	G
6-m radio telescope				Inactive

German Spanish Astronomy Center , Jesús Durbán Remón 2, Apartado Correos 511, E-04080 Almería, Spain	1.52-m reflector	-2 32 10	+37 13 45	2168	U 1977+;	Spanish telescope
	3.5-m Zeiss Ritchey-Chrétien reflector	-2 32 42	+37 13 18	2168	U 1984+;	German telescope
	0.8/1.2-m Zeiss Schmidt equatorial reflector	-2 32	+37 13	2168	U 1980+;	from Hamburg Obs.
	1.23-m Zeiss Ritchey-Chrétien reflector				1975+;	German telescope
	2.2-m Zeiss Ritchey-Chrétien reflector				1978+;	German telescope
Millimeter Radio Astronomy Institute , Avenida Divina Pastora 7, Núcleo Central, E-18012 Granada, Spain	30-m radio telescope	-3 23 58.1	+37 04 05.6	2870	G 09/1985+;	French/German telescope
National Astronomical Observatory , Calle de Alfonso XII 3, E-28014 Madrid, Spain	40-cm Grubb equatorial refractor	-3 41 07.65	+40 24 35.4	670	EU 1921+	
	27-cm Merz refractor	-3 41 07.65	+40 24 35.4	670	EU 1857+	
	20-cm Grubb equatorial photographic refractor	-3 41 07.2	+40 24 32.4	660	EU 1900+	
	15-cm Zeiss astrograph				1915+	
	16-cm Repsold meridian circle	-3 41 16.5	+40 24 30.0	660	U 1853+	
	Prin transit instrument				1925-1947	
	13-cm Steinheil equatorial telescope				1860-1945	
	58-mm Bird transit instrument				c.1790-?	
	76-mm Mégnié transit instrument				c.1790-c.1816	
	16.5-cm Dollond transit instrument				1790-c.1816	
	61-cm Herschel reflector				1804-1808; destroyed	
	20-cm Herschel reflector				1790+	
	23-cm Herschel reflector				1797+	
Naval Observatory , Cecilio Pujazon s/n, E-11110 San Fernando, Spain	10-cm Danjon astrolabe	-6 12 13.11	+36 28 01.4	27	PD	
	18-cm Grubb-Parsons meridian circle	-6 12 19.45	+36 27 42.1	30	A	
	33-cm Carte du Ciel Gautier astrograph	-6 12 17.1	+36 27 57.1	30	PD	
	15.2-cm Cooke equatorial refractor	-6 12 12.6	+36 28 02.1	26	PD	
	50/75-cm SAO Baker-Nunn camera	-6 12 17.91	+36 27 51.4	26	EU	Smithsonian Aph. Obs. instrument
	60-cm CNS Cassegrain telescope	-6 12 18.71	+36 27 50.1	25	EU	French telescope (laser receiver)
	15-cm equatorial refractor	-6 12 19.9	+36 27 41.5	30	G	
	10.2-cm Dublin Grubb refractor	-6 12 19.0	+36 27 41.5	30	G	
	66-mm Dollond refractor	-6 12 19.0	+36 27 41.5	30	G	
	20-cm reflector	-6 12 19.0	+36 27 41.5	30	G	
	18-cm reflector	-6 12 19.0	+36 27 41.5	30	G	
	8-cm Cooke (B) refractor	-6 12 19.0	+36 27 41.5	30	G	
	8-cm Cooke (A) refractor	-6 12 19.9	+36 27 41.5	30	G	
	IGN camera	-6 12 18.33	+36 27 49.8	23	EU	
	28-cm equatorial refractor					
	16-cm astrograph					
	7-cm meridian instrument					
	5-cm meridian instrument					
	12.7-cm Jones transit instrument					
						1829-?; from Naval Obs., Cadiz

D=1.83-m Jones mural circle
 R=1.83-m Bird mural quadrant
 R=61-cm quadrant
 Dollond equatorial refractor

1834-?; O=10-cm

Ramon Maria Aller Observatory, Santiago de Compostela University, Apartado 197, Avenida de las Ciencias s/n, Santiago de Compostela (Coruña), Spain

12-cm Steinheil equatorial refractor -8 33 33.9 +42 52 31.7 240 A
 55-mm Askania transit instrument -8 33 33.4 +42 52 31.7 236 A
 35-cm Celestron telescope -8 33 33.7 +42 52 31.7 240 A
 38-mm Troughton & Simms theodolite

Roque de los Muchachos Observatory, Astrophys. Inst. of the Canaries, Apartado de Correos 303, E-38700 Santa Cruz (La Palma), Canary Islands

17.8-cm Carlsberg Grubb-Parsons meridian circle -17 52 56.70 +28 45 36.0 2326 G2 05/1984+; Danish/UK/Spanish telescope
 45-cm Utrecht open telescope 1978-?; former; Dutch telescope
 50-cm solar tower vacuum telescope 1982+; Swedish telescope
 60-cm photometric Cassegrain reflector -17 52 06 +28 45 10 2360 U 1982+; Swedish telescope
 4.22-m Herschel Grubb-Parsons Cassegrain reflector -17 52 53.9 +28 45 38.3 2332 G2 1987+; UK/Dutch telescope
 2.54-m Isaac Newton Grubb-Parsons Cass. equat. refl. (INT) -17 52 39.5 +28 45 43.4 2336 G2 02/1984+; UK/Dutch telescope
 1.0-m Kapteyn Grubb-Parsons astrometric reflector -17 52 41.2 +28 45 40.1 2364 G2 03/1984+; UK/Dutch/Irish telescope
 2.56-m Nordic optical/infrared Cassegrain altaz. telescope -17 53 +28 45 2382 U 1988+
 3.5-m Galileo Zeiss Ritchey-Chrétien altazimuth reflector -17 53 +28 46 2400 U 1995+; Italian Telescope
 array of cosmic ray detectors 1988+
 gamma ray telescope UK/Spanish telescope

Teide Observatory, Astrophysical Institute of the Canaries, Camino de la Hornera s/n, E-38200 La Laguna (Tenerife), Canary Islands

1.55-m Sanchez infrared telescope -16 29 45 +28 17 32 2395 U 1972+; Spanish telescope
 30-cm photopolarimeter 1964+; French instrument
 50-cm equatorial photometric telescope 1972+; Belgian telescope
 40-cm Newton solar tower vacuum telescope 1972+; Spanish/German telescope
 25-cm Razdow heliograph 1969+; Spanish telescope
 60-cm Turm solar tower vacuum telescope 1989+; German telescope
 45-cm Gregory/Coudé solar vacuum telescope 1986+; from Locarno Solar Obs.; German telescope
 80-cm telescope 1990+; Spanish telescope
 90-cm THEMIS telescope 1991+; French telescope
 2x40-cm double horn antenna UK/Spanish telescope
 1.00-m parabolic antenna 1988+; UK/Spanish telescope

Yebes Astronomical Center, National Astronomical Observatory, Apartado 148, E-19080 Guadalajara, Spain

40-cm Zeiss refractor -3 06 +40 31 30 914 U 1976+
 Zeiss solar telescope -3 06 +40 31 30 914 U 1976+
 13.7-m mm-wavelength radio telescope -3 06 +40 31 30 914 U 1976+

SWEDEN

EISCAT Kiruna Station, European Incoherent Scatter Facility, Box 812, S-981 28 Kiruna, Sweden
 32-m dish antenna +20 26 06.81 +67 51 38.4 418 EU

Jävan Station, Lund Observatory , Box 43, Svanegatan 9, S-221 00 Lund, Sweden				
61-cm equatorial Nasmyth/Cassegrain reflector	+13 25 58.6	+55 37 22.8	145	G
35-cm Schmidt/Cassegrain reflector	+13 25 57.5	+55 37 22.1	145	G
Kvistaberg Observatory , Uppsala University, S-197 91 Bro, Sweden				
1.0/1.35-m Schmidt telescope	+17 36 24	+59 30 06	33	U 09/1963+; Uppsala Univ. Obs. telescope
30/38-cm Schmidt telescope				09/1971+
41-cm photoelectric/photometric Cassegrain reflector				1920+
12/13-cm photovisual double refractor				
Lund Observatory , Lund University, Box 43, Svanegatan 9, S-221 00 Lund, Sweden				
16-cm Repsold meridian circle	+13 11 13.9	+55 41 51.6	34	A
25-cm solar telescope	+13 11 14.5	+55 41 51.6	34	A
10.8-cm Steinheil-Jünger equatorial refractor	+13 11 19.5	+55 42 01	34	EU
18-cm astrograph				?
24.5-cm Merz-Jünger equatorial refractor				1965
Repsold universal instrument				?
Onsala Space Observatory , Chalmers Technical University, S-439 00 Onsala, Sweden				
26-m equatorial parabolic radio telescope	+11 55 08.5	+57 23 37.0	24	G 1963+
20-m radio telescope	+11 55 39.4	+57 23 46.9	25	G 1976+
7.5-m radio telescopes #1				Former
7.5-m radio telescopes #2				Former
7.5-m radio telescopes #3				Former
10x13-m rectangular antenna #1				Former
10x13-m rectangular antenna #2				Former
Stockholm Observatory , Stockholm University, S-133 36 Saltsjöbaden, Sweden				
60/50-cm Grubb-Parsons photovisual double refractor	+18 18 30	+59 16 18	60	U 1931+
1.0-m Cassegrain/Newtonian reflector	+18 18 30	+59 16 18	60	U 1931+
40-cm Zeiss astrograph	+18 18 30	+59 16 18	60	U 1931+
65-cm Schmidt reflector	+18 18 30	+59 16 18	60	U 1963+
25-cm Zeiss reflector				
R=1.07-m Bird quadrant				
SWITZERLAND				
Arosa Astrophysical Observatory , CH-7050 Arosa, Switzerland				
11-cm coronagraph	+9 40 07	+46 46 57	2050	A
refractor	+9 40 07	+46 46 57	2050	A
horizontal solar telescope	+9 40 07	+46 46 57	2050	A
coelostat				
Basle University Astronomical Institute , University of Basle, Venusstrasse 7, CH-4103 Binningen, Switzerland				
7-cm transit instrument	+7 35 00.3	+47 32 27.2	318	A
60-cm Cassegrain reflector				

17-cm equatorial telescope
 30-cm reflector
 40/48-cm Schmidt reflector
 7-cm meridian circle

Cantonal Observatory, Rue de l'Observatoire 58, CH-2000 Neuchâtel, Switzerland

25-cm photographic zenith tube
 30/36-cm Zeiss photovisual double astrograph
 16-cm Zeiss refractor
 11.7-cm meridian circle
 7-cm Bamberg transit instrument

A c.1955+
 EU c.1911+
 c.1920+
 Former
 Former

Geneva Observatory, Chemin des Maillettes 51, CH-1290 Sauverny, Switzerland

62.5-cm Cassegrain reflector
 27-cm Plantamour equatorial telescope

EU 1976+
 1966+

Gornergrat North & South Observatory, Sidlerstrasse 5, CH-3012 Berne, Switzerland

1.0-m Ritchey-Chrétien reflector
 1.5-m infrared reflector
 3-m submillimeter radio reflector

G 1976-1985; former; French telescope
 1979+; Italian telescope
 1986+; German telescope

High Alpine Research Observatory, Sidlerstrasse 5, CH-3012 Berne, Switzerland

76-cm Grubb-Parsons Cassegrain/Coudé telescope
 50-cm solar telescope
 1-m Schaeer Cassegrain reflector
 60-cm Schaeer Cassegrain reflector
 30-cm coelostat

G 1967+
 1958+
 1926-1930; Geneva Obs. tel.; to Obs. of Haute-Provence
 1924-?; former; Meudon Obs. telescope

Swiss Federal Observatory, Institute of Astronomy, ETH Zentrum, SEC, CH-8092 Zürich, Switzerland

meridian circle
 solar tower telescope
 refractor
 16-cm Kern-Merz refractor
 30/35-cm Zeiss equatorial photovisual refractor
 8-cm Fraunhofer equatorial refractor
 42/34-cm photovisual astrograph
 8-cm spectrohelioscope
 Bamberg universal instrument
 12-cm meridian circle
 8-cm Ertel meridian circle
 15-cm Zeiss refractor
 15-cm Kern equatorial telescope
 89-mm Merz equatorial telescope

+8 33 03.9 +47 22 38.3 469 A
 +8 33 04.6 +47 22 38.6 481 U
 +8 33 03.1 +47 22 38.9 485 U
 +8 33 04.5 +47 22 37.6 469 A
 +8 33 04.3 +47 22 38.9 469 A

University of Lausanne Observatory, University of Lausanne, Institute of Astronomy, CH-1290 Chavannes-des-Bois, Switzerland

62.5-cm Cassegrain reflector

+6 08 12.2 +46 18 26.9 465 EU 1976+

Zimmerwald Observatory, Berne University, Sidlerstrasse 5, CH-3012 Berne, Switzerland
+7 27 58.24 +46 52 40.3 903 EU
40/60/103-cm Schmidt telescope
62-cm Cassegrain reflector
25/40-cm Schmidt reflector #1
25/40-cm Schmidt reflector #2

TADZHIKISTAN

Institute of Astrophysics, Tadjzhik Academy of Sciences, Ul. Sviridenko 22, 734670 Dushanbe, Tadjzhikistan
+68 46 52.0 +38 33 40.0 820 A
76-mm refractor
15-cm refractor
binoculars
+68 46 52.0 +38 33 40.0 820 A
+68 46 52.0 +38 33 40.0 820 A

TAIWAN (REPUBLIC OF CHINA)

National Central University Observatory, National Central University, Department of Physics, Chung-li 32054, Taiwan
+121 11 10.3 +24 58 09.2 152 G 10/1980+
61-cm Boller & Chivens reflector
18-cm Cassegrain reflector
11-cm equatorial refractor

Taipei Observatory, 5 Chung-shan North Road, Section 4 (Yuan-shan), Taipei 10452, Taiwan
+121 31 38 +25 04 40.3 31 G ?-1973; inactive
41-cm Cassegrain/Newtonian reflector
25-cm refractor
12.5-cm refractor #1
12.5-cm refractor #2
15-cm cometseeker
20-cm coelostat
c.1973+
c.1972+
1989+
c.1979+
c.1983+

TURKEY

Ege University Observatory, Ege University (Campus), 35100 Bornova-Izmir, Turkey
+27 16 30 +38 23 54 795 G
48-cm Cassegrain reflector
15.3-cm Unitron refractor
+27 15 45 +38 23 52 632 A
Istanbul University Observatory, Istanbul University, 34452 Istanbul, Turkey
+28 57 52.40 +41 00 40.0 65 A 1935+
30-cm Zeiss astrographic refractor
7-cm Askania meridian telescope
12-cm refractor
13-cm equatorial photovisual telescope
15-cm refractor
1935+
1935+
1935+
1935+

Kandilli Observatory, Bogazici University, 81220 Çengelköy-Istanbul, Turkey

9-cm transit telescope	+29 03 39	+41 03 49	120	A	?-1950
10-cm OPL Danjon astrolabe					?-1970
9-cm Askania zenith telescope					?-1950
12.5-cm refractor					c.1960+
20-cm Zeiss visual refractor					c.1930+
15-cm photovisual refractor #1					c.1965+
15-cm photovisual refractor #2					c.1965+
11-cm refractor					c.1970+
10-cm refractor					c.1975+

University of Ankara Observatory, University of Ankara, Astronomy Department, 06100 Beşevler, Ankara, Turkey

30-cm Maksutov photoelectric Cassegrain telescope	+32 46 45	+39 50 37	1266	G	1975+
15-cm Zeiss Coudé refractor					1963+
15-cm photographic refractor					?-1975
small radio telescope					

UKRAINE

Crimean Astrophysical Observatory-Partizanskoye, P/O Nauchny, 334413 Crimea, Ukraine

1.27-m reflector	+34 01 00	+44 43 42	550	U	1949+
2.64-m Shajn equatorial reflector	+34 00	+44 44	----	U	1960+
51-cm Maksutov telescope					1953+
40-cm double photographic astrograph					1949+
89-cm solar tower telescope					1954+
20-cm Lyot coronagraph					1948+
51-cm Lyot coronagraph					1978+
1.27-m Nikonov reflector					1976+
69-cm reflector					1968+
81-cm reflector					1988+
46-cm solar tower telescope					1970+
80-cm Jena Ritchey-Chrétien reflector					c.1989+

Crimean Astrophysical Observatory-Simeis, P/O Nauchny, 334413 Crimea, Ukraine

1-m Grubb reflector	+34 00 57.10	+44 32 07.8	676	U	05/1926-c.1943
B=800-m 2-element interferometer					Two 31-m reflectors
19-m steerable paraboloid					1967+
22-m steerable paraboloid					
18x8-m steerable cylindrical paraboloid					
radar site #1	+33 15 00.00	+44 58 27.3	----	U	
radar site #2	+33 14 54.38	+44 58 27.0	----	U	

Institute of Radio Astronomy, Ukrainian Academy of Sciences, Ul. Krasnoznamennaya 4, 310002 Kharkov, Ukraine

B=1860x900-m					
UTR-2 T-shaped dipole array	+36 56	+49 38	150	U	
URAN-1 linear array interferometer	+36 21	+49 39	150	U	

Kharkov University Astronomical Observatory, Kharkov University, Ul. Sumskaya 35, 310022 Kharkov, Ukraine

20-cm Zeiss refractor	+36 13 55.8	+50 00 09.9	138	A
15-cm refractor	+36 13 55.8	+50 00 09.9	138	A
26-cm refractor	+36 13 55.8	+50 00 09.9	138	A
76-mm refractor	+36 13 55.8	+50 00 09.9	138	A
16-cm meridian circle	+36 13 57.69	+50 00	----	A
5-cm telescope	+36 13 55.8	+50 00 09.9	138	A
60-cm reflector				
70-cm transit instrument				
16-cm reflector				

Kiev University Observatory, Kiev State University, Ul. Observatoria 3, 252053 Kiev, Ukraine

24-cm Gomp double astrograph	+30 29 55	+50 27 12	184	EU
12-cm Ertel meridian circle	+30 30 08.4	+50 27 11.8	184	U 1845-1870
12.7-cm Maksutov telescope	+30 29 55	+50 27 12	184	EU
10.7-cm Reinfelder-Hertel refractor	+30 29 55	+50 27 10	184	U
7-cm Goerz refractor	+30 29 55	+50 27 10	184	U
24.3-cm Repsold-Merz refractor	+30 30 07	+50 27 10	184	A
12.7-cm astrograph	+30 30 07	+50 27 10	184	A
12-cm Utzschneider-Fraunhofer cometseeker	+30 30 07	+50 27 10	184	A
72-mm Fraunhofer-Utzschneider refractor	+30 30 07	+50 27 10	184	A
83-mm Busch refractor	+30 30 07	+50 27 10	184	A
Bardu telescope	+30 30 07	+50 27 12	184	A
Universal precision theodolite	+30 30 07	+50 27 12	184	A
portable azimuthal telescope	+30 30 07	+50 27 12	184	A 1845-?
11.4-cm Ertel transit instrument				1845-1892
25-cm Utzschneider-Fraunhofer equatorial refractor	+30 30 07	+50 27 10	184	A
75-mm binoculars	+30 30 07	+50 27 12	184	A
Zeiss binoculars				
solar horizontal spectrograph				

Lvov University Observatory, Lvov State University, Ul. Lomonosova 8, 290005 Lvov, Ukraine

14-cm Zeiss astrographic refractor	+24 01 48	+49 49 58	330	EU
13.5-cm Merz refractor	+24 01 46.8	+49 49 58	330	EU
8-cm refractor	+24 01 46.8	+49 49 58	330	EU
13-cm Zeiss refractor	+24 01 46.9	+49 49 57.6	330	G
75-mm Plössl refractor	+24 01 46.9	+49 49 57.6	330	G
21-cm vertical solar telescope				
1.05-m astrocamera				
8-cm binoculars	+24 01 46.9	+49 49 57.6	330	EU

Main Astronomical Observatory, Ukrainian Academy of Sciences, Golosiiv, 252650 Kiev, Ukraine

19-cm vertical circle	+30 30 25	+50 21 55	188	A 1971+
40-cm long-focus astrograph	+30 30 00	+50 21 56	196	A 1949+
12-cm double astrograph	+30 30 00	+50 21 56	184	A Former
40/40-cm wide-angle twin astrograph	+30 30 20	+50 21 54	193	A 1975+
44-cm horizontal solar telescope	+30 30 00	+50 21 00	185	A 1966+
70-cm reflector	+30 30 00	+50 21 00	184	A 1962+

60-cm reflector #1	+42 31 00	+43 16 00	3100	A 1982+; Terskol station
60-cm reflector #2	+42 31 00	+43 16 00	3100	A 1987+; Terskol station
60-cm reflector #3	+66 52 00	+38 42 00	2730	A 1981+; Majdanak station

Nikolaev Astronomical Observatory, Ul. Observatornaya 1, 327030 Nikolaev, Ukraine

15-cm meridian circle	+31 58 28.8	+46 58 18.5	54	A
16-cm Repsold-Merz refractor	+31 58 27	+46 58 20	55	A c.1824-?
transit instrument	+31 58 27.52	+46 58	----	A
astrograph	+31 58 27	+46 58 20	55	A
11-cm Ertel meridian circle				c.1824-?

11-cm vertical circle				
24-cm Repsold equatorial telescope				
69-mm portable Herbst transit instrument				

Odessa Observatory, I.I. Mechnikov University-Odessa, T.G. Shevchenko Park, 270014 Odessa, Ukraine,

16-cm Cooke refractor	+30 45 30	+46 28 37.5	60	A
8-cm Zeiss telescope	+30 45 30	+46 28 37.7	54	A
11-cm Steinheil telescope	+30 45 27	+46 28 37.5	54	A
binoculars	+30 45 30	+46 28 38.4	54	A

14/15-cm photovisual double astrograph				
14-cm meridian circle				
30-cm Ponomarev reflector				
10-cm refractor				
10-cm triple astrograph				

UNITED KINGDOM

Armagh Observatory, College Hill, Armagh BT61 9DG, Northern Ireland

25.4-cm Robinson Grubb refractor	-6 38 52.3	+54 21 11.4	64	A 1885+
46/30-cm Calver Schmidt refractor	-6 38 51.1	+54 21 11.2	64	U 1883+
63-mm Troughton equatorial refractor				1795+
23-cm Herschel reflector				?-1835
38-cm Grubb Newtonian/Cassegrain reflector				1835-1921
15.9-cm Ellison refractor				1921-?, to Royal School
D=1.42-m Jones mural circle				1832-c.1890; O=17.8-cm
95-mm Jones transit instrument				1827-?
R=3.66-m zenith sector				1841-?, O=10.8-cm
99-mm achromatic telescope				
heliostat				

Sisson brass quadrant				
38-mm Jones refractor				c.1830-?
Dollond split-objective telescope				c.1795-?
Adams transit instrument				?-1851; to Queen's College
Adams reflector				

15-cm Short Newt./Cass./Gregorian reflector				
Dollond refractor #1				
Dollond refractor #2				

Gilkerson transit theodolite
 Adams equatorial theodolite
 Dollond theodolite
 Opik's special meteor camera #1
 Opik's special meteor camera #2

Cambridge University Observatories, Madingley Road, Cambridge CB3 9DQ, England

63-cm Newall Cooke equatorial visual refractor	+0 05 44.1	+52 12 48.6	30	GB	1891-1957; to Pentele Sta., Greece
38-cm Huggins Grubb visual achromatic refractor	+0 05 47.5	+52 12 47.3	30	GB	From Tulse Hill, England
29-cm Northumberland Cauchoix visual refractor	+0 05 41.2	+52 12 51.6	28	U	1838+
20-cm Thorowgood refractor	+0 05 39	+52 12 50	29	U	
13-cm Stevenson refractor	+0 05 46.1	+52 12 48.3	30	GB	
12.7-cm Dollond transit instrument	+0 05 41.2	+52 12 51.6	28	U	1824-1869
90-cm Grubb-Parsons Newtonian reflector				1890+	
90-cm Cassegrain/Coudé reflector					
43/63/162-cm Grubb-Parsons Schmidt telescope					
32-cm Sheepshanks Grubb equat. photographic refr.					
32-cm solar telescope					1898+
30-cm Cooke triple telescope					1903-1908; to Royal Obs., Greenwich
16.5-cm Cookson floating zenith telescope					
40-cm coelostat					1832-1899
7-cm Jones equatorial refractor					1833-1871; O=114-mm; museum
D=2.44-m Troughton & Simms mural circle					

Chilbolton Observatory, Chilbolton, Stockbridge, Hampshire SO20 6BJ, England

25-m steerable altazimuth paraboloid -1 26 13.12 +51 08 40.1 100 GB c.1967+

City Observatory, Calton Hill, Edinburgh EH7 5AA, Scotland

16-cm Fraunhofer/Repsold transit circle	-3 10 45.7	+55 57 23.2	107	A	1834-1888; in situ
15-cm Cooke photovisual telescope	-3 10 45.7	+55 57 23.2	107	A	1896+
30-cm Dall-Kirkham telescope	-3 10 45.7	+55 57 23.2	107	A	
46-cm Dall-Kirkham telescope	-3 10 45.7	+55 57 23.2	107	A	
32-cm reflector	-3 10 45.0	+55 57 23.2	106	GB	
53-cm Buckingham equatorial telescope					
Gregorian reflector					1833-1840; in situ
89-mm Troughton & Simms altazimuth instrument					1814-1833
5-cm Troughton transit instrument					?-1926
55-cm refractor					?-1926
30-cm Key reflector					

Godlee Observatory, University of Manchester, Institute of Science and Technology, Sackville Street, Manchester M60 1QD, England

20-cm Grubb refractor	-2 13 57.52	+53 28 34.1	77	GB	1903+
30-cm Grubb reflector	-2 13 57.52	+53 28 34.1	77	GB	
68-mm Troughton & Simms meridian circle				Former	

Mills Observatory, Balcay Park, Glamis Road, Dundee DD2 2UB, Scotland

25-cm Cooke refractor	-3 00 39.8	+56 27 54.2	152	GB	1952+
10-cm Merz refractor	-3 00 39.8	+56 27 54.2	152	GB	c.1960-1989

Mullard Radio Astronomy Observatory, Cambridge University, Cavendish Laboratory, Madingley Road, Cambridge CB3 0HE, England
 4.9-km 8-element Ryle radio telescope +0 02 37.23 +52 10 12.2 17 A 1972+; eight 13-m paraboloids
 1.61-km 3-element radio telescope +0 02 21.64 +52 09 47.3 17 A 1964+; three 18.3-m paraboloids
 805-m 4-element radio telescope 1968+; four 9-m paraboloids
 20x450-m cylindrical reflector 1957+
 471x80-m phased array 1978+
 4.7-km 240-yagi array 1983+
 4.7-km 58-yagi array 1987+
 250x64-m phased array 1976-?; former
 470x45-m phased array 1967-?; former
 1.4-km 50-yagi array synthesis interferometer 1975-?; former
 5-km 60-yagi array (CLFST) 1975-?; former

Nuffield Radio Astronomy Laboratories, University of Manchester, Jodrell Bank, Macclesfield, Cheshire SK11 9DL, England

76-m Mark IA steerable altazimuth parabolic reflector -2 18 25 +53 14 10.5 78 GB 1957+
 38x26-m Mark II steerable altazimuth radio telescope -2 18 06 +53 14 06 78 GB 1964+
 38x26-m Mark III steerable altazimuth radio telescope -2 35 42 +53 06 48 48 GB 1966+; Wardle site
 25-m steerable altazimuth parabolic radio telescope -2 59 42 +52 47 24 65 GB 1977+; Knockin site
 25-m equatorial radio telescope -2 08 36 +52 06 00 43 GB 1960+; Delford site
 66.4-m radio dish Univ. of Manchester telescope
 38-m radio dish U Univ. of Manchester telescope
 13-m altazimuth radio dish
 9-m radio dish
 7.6-m radio dish
 3-m radio dish
 25-m steerable altazimuth paraboloid
 25-m steerable altazimuth paraboloid

Royal Observatory Edinburgh, Blackford Hill, Edinburgh EH9 3HJ, Scotland

91-cm Grubb-Parsons Cassegrain reflector -3 10 57 +55 55 30.0 146 U 1928-1981
 61-cm reflector -3 11 03 +55 55 30.0 146 U ?-1896
 38-cm Grubb visual refractor -3 11 03 +55 55 30.0 146 U 1896-1932
 51-cm Grubb-Parsons reflector -3 11 15.45 +55 55 23.9 141 GB
 15.4-cm Simms cometseeker -3 11 15 +55 55 24.9 141 GB 1896+
 25-cm astrographic camera ?-1932
 16.5-cm Repsold/Fraunhofer transit circle 1896-?; former
 21.8-cm Troughton & Simms transit circle 1963-c.1975; to St. Andrews Univ. Obs.
 41/41-cm Grubb-Parsons twin photometric reflector 1951-1975
 41/63-cm Cox-Hargreaves/Thomson Schmidt telescope 1896+
 33-cm reflector 1896+
 31-cm Browning reflector 1896+
 15.3-cm Cooke refractor 1896+
 76-mm Cooke refractor 1896+
 Cooke theodolite 1896+
 Troughton & Simms altazimuth instrument
 10-cm reversible transit instrument
 71-mm Troughton & Simms transit instrument
 10-cm Repsold/Grubb heliometer 1896+

Eichens-Gautier siderostat
kinetheololite
38-cm Grubb visual refractor
25-cm astrographic camera

1932+
1932+

Satellite Laser Ranger Group, Herstmonceux Castle, Hailsham, East Sussex BN27 1RP, England

50-cm SLR reflector (receiver) +0 20 15.82 +50 52 00.5 31 GB 1983+
10-cm SLR refractor (transmitter) +0 20 15.82 +50 52 00.5 31 GB 1983+

University of Glasgow Observatory, University of Glasgow, Acre Road/Maryhill Road, Glasgow G20 0TL, Scotland

50-cm Grubb-Parsons Ritchey-Chrétien reflector -4 18 20 +55 54 08 53 G ?-1984; former
30-cm telescope #1 -4 18 22 +55 54 09 53 G ?-1987; former
30-cm telescope #2 -4 18 20 +55 54 08 53 G 1987+
6-cm transit telescope -4 18 19 +55 54 08 53 G
18-cm Cooke refractor ?-1965; former

coelostat

23-cm equatorial telescope

University of London Observatory, University College London, Mill Hill Park, London NW7 2QS, England

61-cm Wilson reflector -0 14 26.50 +51 36 46.3 81 A 1925+; from Daramona, Ireland
20-cm Cooke-Fry refractor -0 14 26.84 +51 36 45.8 81 A
11.4-cm reflector -0 14 26.8 +51 36 45.8 81 A

61/46-cm photovisual refractor

20-cm coelostat

2-m radio dish

University of St. Andrews Observatory, University of St. Andrews, Buchanan Gardens, St. Andrews, Fife KY16 9LZ, Scotland

50-cm Ritchey-Chrétien reflector -2 48 52.5 +56 20 12 30 U 1973+
90-cm Schmidt/Cassegrain reflector -2 48 54 +56 20 13.2 30 U 1962+
15-cm Zeiss refractor -2 48 53.7 +56 20 13.8 29 GB 1965+
41/41-cm Grubb-Parsons twin Ritchey-Chrétien reflector -2 48 54.2 +56 20 12.7 30 U 1983+; from Royal Obs. Edinburgh
40/50-cm Schmidt/Cassegrain reflector -2 48 53.6 +56 20 14.1 29 U 1965+

USA—ALABAMA

University of Alabama Observatory, University of Alabama, Dept. of Physics and Astronomy, 206 Gallalee Hall, Box 870324, Tuscaloosa, Alabama 35487-0324

25-cm Fecker refractor -87 32 32.6 +33 12 33 87 U

15-cm refractor

20-cm Schmidt camera

25-cm Newtonian reflector

20-cm Celestron reflector

USA—ARIZONA

Anderson Mesa Station, Lowell Observatory, P.O. Box 1269, 1400 West Mars Hill Road, Flagstaff, Arizona 86001
 1.83-m Perkins Warner & Swasey reflector -111 32 09.30 +35 05 48.6 2200 NA 1961+; from Perkins Obs.
 1.07-m Hall Ritchey-Chrétien reflector #1 -111 32 07.9 +35 05 48.3 2200 NA 1970+
 33-cm Lowell astrophotographic refractor -111 32 08.0 +35 05 44.4 2200 NA 1971+
 79-cm Cassegrain reflector -111 32 09.0 +35 05 54.6 2200 NA 1961+
 Navy Prototype Optical Interferometer (NPOI) -111 32 02 +35 05 45 2205 S 10/1994+; U.S. Naval Obs./Lowell Obs./NRL instr.

Flagstaff Station, U.S. Naval Observatory, P.O. Box 1149, Flagstaff, Arizona 86002-1149
 1.52-m astrometric reflector -111 44 23.6 +35 11 02.5 2316 NA 06/1964+
 1.02-m Ritchey-Chrétien reflector -111 44 14.9 +35 11 03.6 2312 NA 09/1955+; from U.S. Naval Obs.
 61-cm Cassegrain reflector -111 44 15.5 +35 11 04.5 2313 NA 1971+
 25-cm Fraund Automatic Transit Circle (ATC) -111 44 37.4 +35 11 04.6 2271 NA 09/1976-?; modified to 20-cm refractor
 20-cm refractor -111 44 37.4 +35 11 04.6 2271 NA Formerly 25-cm ATC

Fred L. Whipple Observatory, Harvard-Smithsonian Center for Astrophysics, P.O. Box 97, Amado, Arizona 85645-0097
 1.5-m Tillinghast reflector -110 52 39.00 +31 40 51.4 2344 NA 1970+
 10-m mosaic optical reflector -110 52 41.60 +31 40 49.0 2342 NA 248 hexagonal reflectors
 51-cm reflector with laser -110 52 38.65 +31 41 02.8 2381 NA c.1969-1986; inactive
 51/76-cm Baker-Nunn Schmidt camera -110 52 38.65 +31 41 02.7 2383 NA 03/1968-c.1975; from NASA/Langley Meteor Obs.
 25-cm Fairborn Automatic Photoel. Telescope (APT) -110 52 38.65 +31 41 02.8 2381 NA 1985+
 25-cm Phoenix Automatic Photoel. Telescope (APT) -110 52 38.65 +31 41 02.8 2381 NA 1986+
 41-cm Vanderbilt Automatic Photoel. Telescope (APT) -110 52 38.65 +31 41 02.8 2381 NA 1987+
 61-cm SUNY Cassegrain reflector -110 53 08.64 +31 40 19.9 2344 NA 1972-1990; to Custer Inst. Obs.
 76-cm SAO telescope -110 52 38.65 +31 41 02.7 2381 NA 1988+; Smithsonian Aph. Obs. telescope
 76-cm CAPT telescope -110 52 38.65 +31 41 02.7 2381 NA 1989+
 76-cm Fairborn telescope #1 -110 52 38.65 +31 41 02.7 2381 NA 1989+
 1.2-m reflector -110 53 08.64 +31 40 19.9 2344 NA 03/1991+
 Infrared/Optical Telescope Array (IOTA) 12/1993+; two 45-cm reflectors

Kitt Peak National Observatory, P.O. Box 26732, Tucson, Arizona 85726-6732
 4-m Mayall Ritchey-Chrétien equatorial reflector -111 35 57.61 +31 57 50.3 2120 NA 02/1973+
 2.1/1.6/1.2-m McMath solar telescope -111 35 40.80 +31 57 30.4 2078 NA 11/1962+
 2.13-m Corning Cassegrain/Coudé reflector -111 35 51.56 +31 57 29.2 2096 NA 09/1964+
 1.3-m Boller & Chivens Cassegrain reflector -111 35 51.78 +31 57 34.5 2074 NA c.1965+
 91-cm Boller & Chivens reflector #2 -111 35 56.33 +31 57 28.7 2095 NA Late 1966+
 51-cm reflector #3 -111 35 50.14 +31 57 28.0 2083 NA
 40-cm Cassegrain reflector #1 -111 35 40.8 +31 57 30.3 2064 NA
 40-cm Cassegrain reflector #2 03/1959-09/1962
 30-cm Schmidt reflector 1973+
 61-cm solar vacuum tower telescope 04/1962-?; to Hard Labor Creek Obs.
 40-cm Boller & Chivens Cassegrain reflector #3 11/1963+
 40-cm Boller & Chivens reflector #4 1993+
 91-cm SARA Warner & Swasey/Brashear reflector #1

- Kitt Peak Station, Steward Observatory**, University of Arizona, Astronomy Department, Building 65, 949 North Cherry Avenue, Tucson, Arizona 85721
 2.29-m Bok Boller & Chivens Ritchey-Chréien refl. -111 35 58.24 +31 57 46.9 2071 NA 09/1969+
 91-cm Warner & Swasey/Brashear reflector #1 -111 35 59.71 +31 57 28.7 2091 NA 11/1963-Summer 1990; to Kitt Peak Natl. Obs.
 51-cm Schmidt/Cassegrain reflector #4 -111 35 58.38 +31 57 28.6 2088 NA 1972+
- Kitt Peak Station, Warner and Swasey Observatory**, Case Western Reserve Univ., Dept. of Ast., 10900 Euclid Ave., Cleveland, Ohio 44106-7215
 61/91-cm Burrell Schmidt reflector -111 35 54.8 +31 57 37.9 2084 NA 06/1979+
- Lowell Observatory**, P.O. Box 1269, 1400 West Mars Hill Road, Flagstaff, Arizona 86001
 61-cm Morgan reflector -111 39 51.2 +35 12 14.1 2219 NA 1971+
 61-cm Clark equatorial reflector -111 39 48 +35 12 08 2210 NA 1896+
 53-cm reflector -111 39 59.2 +35 12 10.4 2213 NA 1951+
 51-cm Tinsley 3-element apochromatic refractor -111 39 51.3 +35 12 09.7 2220 NA 1964-1984
 38-cm Petittidier reflector Former
 1.07-m Clark reflector #2 -111 39 56.7 +35 12 11 2215 NA 1909-1964
 46-cm astrograph -111 39 51.3 +35 12 09.7 2220 NA 06/1984+
 33-cm Lowell astrographic refractor -111 39 51.2 +35 12 14.1 2219 NA 1929-1971; to Anderson Mesa Station
 46-cm Brashear refractor Mounted with 30-cm refractor
 30-cm Clark photographic refractor Mounted with 46-cm refractor
 1.02-m Boller & Chivens Cassegrain/Coudé reflector From Lindheimer Rsch. Center
 41-cm Boller & Chivens Cassegrain reflector From Lindheimer Rsch. Center
 38-cm reflector Never mounted
 23-cm Schmidt camera In storage since 1968
 20-cm Schmidt camera In storage since 1968
 13-cm Brashear photographic doublet In storage
- McGraw-Hill Observatory**, Massachusetts Institute of Technology, Box 220, Sells Star Route, Tucson, Arizona 85735
 1.3-m Tinsley Cassegrain/Coudé reflector -111 36 57 +31 57 01 1925 NA 05/1975+; from Univ. of Michigan Radio Ast. Obs.
 2.4-m Hiltner Ritchey-Chréien equatorial reflector -111 37 +31 57 1938 U 1985+; Michigan/Dartmouth/MIT tel.
- MMT Observatory**, University of Arizona, 949 North Cherry Street, Tucson, Arizona 85721
 4.5-m Multiple-Mirror Telescope (MMT) -110 53 04.3 +31 41 19.6 2608 NA 05/1979-1998; six 1.83-m reflectors
 6.5-m altazimuth reflector 1998+
- Mount Bigelow (Catalina) Station, Steward Observatory**, Univ. of Arizona, Astronomy Dept., 949 North Cherry Avenue, Tucson, Arizona 85721
 1.54-m Cassegrain/Coudé reflector -110 43 55.1 +32 25 00.7 2510 NA 10/1965+
 42-cm Schmidt camera 1972+
 1.02-m Cassegrain reflector To Mt. Lemmon Station
 53-cm Perkin-Elmer/Astro Mechanics Cass. reflector 01/1963-?
- Mount Lemmon Infrared Observatory**, Univ. of Minnesota/Univ. of California, General Delivery, Summerhaven P.O., Tucson, Arizona 85619
 1.52-m Astro Mechanics Cassegrain reflector -110 47 27 +32 26 29 2776 U 12/1970+
- Mount Lemmon (Catalina) Station, Steward Observatory**, Univ. of Arizona, Ast. Dept., Bldg. 65, 949 North Cherry Ave., Tucson, Arizona 85721
 1.54-m multipurpose reflector -110 47 16.9 +32 26 33.9 2790 NA 1970+
 1.02-m Cassegrain reflector -110 47 16.9 +32 26 33.9 2790 NA 1970+
 70-cm Cassegrain reflector -110 47 16.9 +32 26 33.9 2790 NA 1970-1989; former

National Radio Astronomy Observatory, c/o University of Arizona, Astronomy Department, 949 North Cherry Avenue, Tucson, Arizona 85721-0655
 10.75-m mm-wavelength parabolic radio telescope -111 36 51.12 +31 57 12.1 1939 NA 1966-?; modified to 12-m telescope
 12-m mm-wavelength parabolic radio telescope -111 36 51.12 +31 57 12.1 1939 NA Formerly a 10.75-m telescope

Northern Arizona University Observatory, Northern Arizona University, Department of Physics and Astronomy, Box 6010, Flagstaff, Arizona 86011-6010
 61-cm Fecker Cassegrain reflector -111 39 09.84 +35 11 03.5 2110 NA 1952+
 41-cm Fecker coelostat -111 39 09.84 +35 11 03.5 2110 NA 1952-1962

Steward Observatory, University of Arizona, Astronomy Department, Building 65, 949 North Cherry Avenue, Tucson, Arizona 85721
 53-cm Cassegrain reflector -110 56 55.2 +32 13 59.4 757 U 1963+
 91-cm Warner & Swasey/Brashear reflector -110 56 55.2 +32 13 54.4 757 U 1922-1963; to Steward Obs. Kitt Peak Station

11-cm Brashear equatorial photovisual refractor
 10-cm Warner & Swasey transit instrument
 76-mm telescope
 20-cm Clark refractor
 32-cm Newtonian reflector

Submillimeter Telescope Observatory, Steward Observatory, University of Arizona, Tucson, Arizona 85721

10-m Heinrich Hertz Submillimeter Telescope (SMT) -109 53 28.4 +32 42 05.8 3190 S 1993+
 8.4/8.4-m Large Binocular Telescope (LBT) -109 51 +32 42 3170 U 1997+

Tumamoc Hill (Catalina) Station, Steward Observatory, Univ. of Arizona, Astronomy Dept., 949 North Cherry Avenue, Tucson, Arizona 85721

41-cm reflector -111 00 20 +32 12 51 945 NA Inactive
 17-cm Bailey astrograph -111 00 20.6 +32 12 47.6 950 NA 1967+
 50-cm Perkin-Elmer/Astro Mechanics Cass. reflector -111 00 20 +32 12 48 950 NA 1972+

Vatican Observatory Research Group, Steward Observatory, University of Arizona, Tucson, Arizona 85721

1.8-m Lennon Vatican Advanced Tech. Tel. (VATT) -109 53 31.25 +32 42 04.7 3181 S 1995+

USA—CALIFORNIA

Big Bear Solar Observatory, California Institute of Technology, 40386 North Shore Lane, Big Bear City, California 92314-9672

65-cm Gregorian vacuum reflector -116 54 51 +34 15 14 2067 U
 25-cm vacuum refractor
 21.8-cm refractor
 15-cm white light refractor
 15-cm patrol telescope
 12.5-cm patrol telescope
 Razdow telescope

At California Inst. of Tech.
 In Tel Aviv, Israel
 From San Fernando Obs.

Chabot Observatory, 4917 Mountain Boulevard, Oakland, California 94619

10.5-cm Fauth transit telescope -122 10 38.12 +37 47 13.0 100 NA
 50-cm Rachel Brashear/Warner & Swasey refractor -122 10 38.61 +37 47 13.1 106 NA 1916+
 24-cm refractor -122 10 37.75 +37 47 14.7 100 NA 1965+
 20-cm Clark refractor -122 10 38.65 +37 47 12.3 103 NA 12/1919+

41-cm reflector
16.3-cm Clark refractor

Goldstone Complex, P.O. Box 997, Barstow, California 92311

26-m equatorial parabolic radio telescope	-116 50 54.74 +35 23 22.3	1036	NA 1958-?; Pioneer Station-inactive
26-m parabolic radio telescope	-116 48 16.59 +35 17 59.9	1001	NA 1962-1978; modified to 34-m; Echo Station
34-m parabolic radio telescope	-116 48 16.59 +35 17 59.9	1001	NA 1978+; formerly 26-m tel.; Echo Station
26-m parabolic radio telescope	-116 47 38.43 +35 14 51.8	1094	NA 1962+; Venus Station
64-m steerable parabolic radio telescope	-116 53 19.15 +35 25 33.3	1032	NA 04/1966-1988; modified to 70-m; Mars Station
70-m steerable parabolic radio telescope	-116 53 19.15 +35 25 33.3	1032	NA 1988+; formerly 64-m tel.; Mars Station
9.15-m unified S-band parabolic radio antenna	-116 52 19.54 +35 20 29.6	968	NA 1965+; Venus Station
26-m unified S-band antenna	-116 52 21.96 +35 20 29.6	973	NA 1965+
12-m antenna	-116 53 12.24 +35 19 54.0	940	NA
minitrack interferometer system	-116 53 57.27 +35 19 48.1	929	NA
20.3-cm MOTS-40 camera	-116 53 57.27 +35 19 48.1	929	NA
16-element SATAN yagi array	-116 53 17.61 +35 19 54.0	937	NA
34-m antenna	-116 53 10.52 +35 25 18.9	994	NA 1988+

Former; from G. Davidson Obs.

Griffith Observatory, 2800 East Observatory Road, Los Angeles, California 90027

30/24-cm Zeiss double refractor	-118 17 56.9 +34 07 06.0	357	NA 09/1955+
20-cm triple coelostat			

Hat Creek Radio Astronomy Observatory, University of California-Berkeley, Route 2, Box 500, Bidwell Road, Cassel, California 96016

26-m steerable equatorial paraboloid	-121 28 22.60 +40 49 04.6	1043	A 06/1962-01/1993; destroyed
9-element BIMA interferometer	-121 28 18.49 +40 49 02.5	----	U Nine 6-m paraboloids
10.1-m equatorial radio reflector			12/1959-c.1960; former
3-m radio dish			c.1970+; formerly part of 2-element interf.
6-m radio reflector			Spring 1968+; was part of 2-el. interf., now part of BIMA

Leuschner Observatory, University of California-Berkeley, Department of Astronomy, Berkeley, California 94720

76-cm Tinsley Ritchey-Chrétien reflector	-122 09 24 +37 55 05.9	304	NA 1968+; from Leuschner Obs., Berkeley
51-cm Cassegrain reflector	-122 09 24 +37 55 05.9	304	NA 1968+; from Leuschner Obs., Berkeley

Lick Observatory, University of California-Santa Cruz, P.O. Box 85, Mt. Hamilton Road, Mt. Hamilton, California 95140

3.05-m Shane reflector	-121 38 09.9 +37 20 35.2	1290	NA 1959+
90-cm Lick Clark/Warner & Swasey equatorial refractor	-121 38 31.1 +37 20 28.3	1290	NA 1888+
16-cm Clark/Repsold meridian circle	-121 38 43.9 +37 20 25.3	1283	A 1884-1956; to La Plata Obs
30-cm Clark equatorial refractor	-121 38 30.2 +37 20 30.6	1285	NA 10/1881-1979; former
61-cm photometric Cassegrain reflector	-121 38 00.7 +37 20 37.3	1295	NA 1964-early 1995; former
51-cm Carnegie Fecker double astrographic camera	-121 38 13.1 +37 20 33.6	1285	NA 1941+
1.02-m Nickel reflector	-121 38 30.2 +37 20 30.6	1285	NA 1980+
91-cm Crossley Grubb/Common reflector	-121 38 35.1 +37 20 18.0	1235	NA 06/1896+
56-cm Tauchmann Cassegrain reflector	-121 38 20.6 +37 20 31.1	1270	NA c.1955+

Shane Coudé Auxiliary Telescope (CAT)

16.5-cm portable Clark/Warner & Swasey equat. refractor

10-cm Clark cometseeker

10-cm Fauth transit/zenith telescope

15-cm Crocker Brashear telescope

Former

1881-1940's; to Leuschner Obs.

horizontal photoheliograph
76-cm KAIT telescope

1881-?
Early 1995+

MIRA Oliver Observing Station, Monterey Inst. for Research in Ast., P.O. Box 1551, 900 Major Sherman Lane, Monterey, California 93940
91-cm Cassegrain reflector -121 34 11.2 +36 18 19.5 1525 NA c.1978+

Mount Laguna Observatory, San Diego State University, Astronomy Department, San Diego, California 92182-0540
60-cm equatorial Cassegrain reflector -116 25 33 +32 50 24 1859 NA 1980+
1.02-m Astro Mechanics equat. Cass./Coudé reflector -116 25 33 +32 50 24 1859 NA 1982+; from Prairie Obs.
41-cm Cassegrain reflector -116 25 33 +32 50 24 1859 NA 1968+
53-cm Cassegrain reflector -116 25 33 +32 50 24 1859 NA 1988+

Mount Wilson Observatory, Hale Solar Laboratory, 740 Holladay Road, Pasadena, California 91106
2.54-m Hooker Cassegrain reflector -118 03 22.4 +34 13 33.2 1737 NA 11/1918-06/1985; 1993+
1.52-m Ritchey reflector -118 03 23.6 +34 13 28.4 1737 NA 12/1908+
61-cm TIE telescope -118 03 36 +34 12 48 1625 U
H=18.3-m Snow tower telescope 1907+

1912+

H=45.7-m solar tower telescope
25-cm Cooke/Fecker astrographic triplet
15.2-m interferometer
2.45-m 5-element CHARA array

Former; to L. McCormick Obs.
Five 1-m telescopes; Georgia State Univ. instrument

Owens Valley Radio Observatory, California Institute of Technology, P.O. Box 387, Big Pine, California 93513

39.6-m steerable altazimuth paraboloid -118 16 53.83 +37 13 55.7 1236 NA
5-m altazimuth paraboloid -118 16 56.2 +37 14 02.6 1222 NA
2-element interferometer -118 17 37.19 +37 13 55.7 1226 NA Two 27.4-m paraboloids
3-element interferometer -118 16 56.2 +37 14 02.6 1222 NA 1984+; three 10.4-m paraboloids
25-m VLBA radio antenna -118 16 33.98 +37 13 54.2 1207 NA 1990+

Palomar Observatory, Palomar Mountain, California 92060

5.08-m Hale Cassegrain reflector -116 51 50.38 +33 21 22.4 1706 NA 11/1949+
1.24/1.83-m Oschin Schmidt photographic equat. telescope -116 51 32 +33 21 26 1696 NA 1948+
1.52-m Ritchey-Chrétien Cassegrain/Coudé reflector -116 51 31 +33 20 56 1683 NA 1970+
46-cm Schmidt camera -116 51 42 +33 21 14 1694 NA
51-cm reflector

San Fernando Observatory, California State University-Northridge, 14031 San Fernando Road, Sylmar, California 91342

61/28-cm vacuum reflector/spectroheliograph -118 29 28.02 +34 18 28.9 371 NA 05/1969+
30-cm optical spar telescope -118 29 28.02 +34 18 28.9 371 NA c.1970+
15-cm solar white-light refractor -118 29 28.02 +34 18 28.9 371 NA c.1964+
1.52-m 3-cm wavelength radio telescope -118 29 28.02 +34 18 28.9 371 NA c.1969-?; inactive
1.52-m 10-cm wavelength radio telescope -118 29 28.02 +34 18 28.9 371 NA c.1969+

Diek Mountain Station, Chamberlin Observatory, University of Denver, Department of Physics, Denver, Colorado 80208-0202

40-cm photographic reflector -105 26 12.8 +39 25 36.7 2675 NA 1979+
 20-cm Schmidt camera -105 26 12.8 +39 25 36.7 2675 NA

Meyer-Womble Observatory, University of Denver, Department of Physics and Astronomy, 2112 East Wesley Avenue, Denver, Colorado 80208-0202

61-cm Ealing-Beck Ritchey-Chrétien Cass. reflector -105 38 25.16 +39 35 12.7 4305 NA 1972-?; to Sapello, New Mexico; NASA tel.
 71/71-cm Meyer Binocular Ritchey-Chrétien Telescope 08/1996+

Sommers-Bausch Observatory, University of Colorado, Astrophysics Department, Boulder, Colorado 80309

60-cm Boller & Chivens Cassegrain/Coudé reflector -105 15 45.0 +40 00 13.4 1653 NA 1973+
 45-cm DFM Cassegrain reflector 1982+
 30/27-cm heliostat 1982+
 27-cm Bausch/Saegmüller reflector 1953-?; museum
 40-cm DFM Cassegrain reflector 1987+

Tiara Observatory, P.O. Box 1059, Colorado Springs, Colorado 80901

15-cm reflector -105 31 00.8 +38 58 09.6 2679 NA 1969+
 41-cm Cassegrain reflector 1978+
 41-cm Newtonian reflector 1986+
 20-cm Cassegrain reflector 1988+
 15-cm yellow light astrograph 1975+
 33-cm yellow light astrograph 1975+
 53-cm blue light astrograph 1975+
 19-cm red light astrograph 1975+
 wide-angle meteor radiant camera (3) 1979+
 color index meteor camera (2) 1979+
 solar eclipse camera (6) 1970+
 meteor trail spectrograph 1988+
 meteor spectrograph (5) 1979+

U.S. Air Force Academy Observatory, USAF Academy-DFP, Colorado Springs, Colorado 80840

60-cm Boller & Chivens Cassegrain/Newtonian reflector -104 52 29.25 +39 00 22.2 2187 A 11/1979+; mounted with 25-cm camera
 25-cm Schmidt camera -104 52 58.99 +39 00 22.4 2184 NA 1969+; mounted with 60-cm reflector
 20-cm PC-1000 camera -104 52 58.99 +39 00 22.4 2184 NA
 40-cm Automated Tracking Telescope (ATT) -104 52 29.2 +39 00 22.0 ---- A 1989+

USA—CONNECTICUT

Van Vleck Observatory, Wesleyan University, Department of Astronomy, Middletown, Connecticut 06457

50-cm Clark equatorial visual refractor -72 39 33 +41 33 18 65 NA 07/1922+
 60-cm Perkin Boller & Chivens Cassegrain reflector -72 39 33 +41 33 18 64 NA 1971+
 25-cm Cassegrain reflector -72 39 33 +41 33 18 65 NA 1986+
 15-cm Fisk Lerebours achromatic refractor 1916-1986
 3.05-m spectrohelioscope Inactive
 30-cm Clark equatorial refractor 1869-1922

transit instrument #1
transit instrument #2

Inactive
Inactive

Western Connecticut State Univ. Obs., Western Conn. State Univ., Dept. of Physics and Astronomy, 181 White Street, Danbury, Connecticut 06810
40-cm reflector -73 26 42 +41 24 02.6 128 NA c.1986+
20-cm Schmidt/Cassegrain reflector Summer 1986-late 1986; former
20-cm portable Newtonian reflector Summer 1986-late 1986; former
portable Questar reflector

USA—DELAWARE

Mount Cuba Astronomical Observatory, P.O. Box 3915, Hillside Mill Road, Greenville, Delaware 19807

61-cm Tinsley equatorial Cassegrain reflector -75 38 01.01 +39 47 03.9 92 NA 09/1963+
11.4-cm Brashear-Clark refractor -75 38 01.4 +39 47 04.1 92 NA 1973+
32-cm reflector -75 38 00.1 +39 47 03.5 83 NA Delaware Ast. Society telescope
10-cm refractor
5-cm portable Zeiss refractor

USA—DISTRICT OF COLUMBIA

NRL Radio Astronomy Observatory, Naval Research Laboratory, Space Science Division, 4555 Overlook Avenue S.W., Washington, D.C. 20375-5000

15.2-m cm-wavelength parabolic reflector -77 01 36.7 +38 49 16.2 30 U 1952+
3-m mm-wavelength parabolic reflector -77 01 36.7 +38 49 16.2 30 U
79.2x67.1-m array
4.88x1.22-m array

U.S. Naval Observatory, 3450 Massachusetts Avenue N.W., Washington, D.C. 20392-5420

66-cm Clark equatorial refractor -77 04 02.40 +38 55 15.0 92 NA 1893+
17.8-cm equatorial refractor (Moon camera) -77 03 58.90 +38 55 15.0 99 NA 1957-1979
30.5-cm Clark/Saegmüller equatorial refractor -77 03 58.90 +38 55 15.0 99 NA 2/1895-1957; 1981+
65-cm photographic zenith tube #7 -77 04 03.99 +38 55 19.4 92 NA 09/1981-12/1991; former
20-cm double astrograph -77 04 03.02 +38 55 19.6 86 NA 1971-11/1985; to Black Birch Obs.; 10/1993+
13-cm Clark refractor -77 03 59.67 +38 55 13.3 89 NA 1966-1973; former
USAF satellite camera #659 -77 03 59.67 +38 55 13.3 89 NA 1963-1965; U.S. Air Force instrument
13-cm NCA Clark refractor -77 04 01.08 +38 55 13.2 82 NA 1939-c.1994; former; Natl. Capital Astr. telescope
12.5-cm prime vertical transit telescope -77 04 02.40 +38 55 17.2 ----
13.5-cm Ertel south transit telescope -77 03 59.55 +38 55 15.0 ----
15-cm Warner & Swasey transit circle -77 04 03.44 +38 55 16.8 88 NA 12/1897-1995; inactive
61-cm reflector -77 04 05.21 +38 55 19.1 93 NA 1971+
1.02-m Ritchey-Chrétien reflector -77 04 05.21 +38 55 19.1 93 NA 1935-1954; to Flagstaff Station
30.5-cm Clark/Saegmüller equatorial refractor -77 04 05.21 +38 55 19.1 93 NA 1961-1971; former
38-cm Warner & Swasey astrograph -77 04 02.40 +38 55 20.7 85 NA 1950-02/1993; to Yerkes Obs.
25-cm astrograph -77 04 02.40 +38 55 20.7 85 NA 1942-1950
12-cm Danjon astrolabe #2 -77 04 04.39 +38 55 19.4 88 NA 1970-c.1982; former
12-cm Danjon astrolabe #1 -77 04 04.39 +38 55 19.4 88 NA 02/1959-05/1961; to Richmond Station; 1995+

20-cm photographic zenith tube #3	-77 04 04.39 +38 55 19.4	88	NA 05/1954-04/1956; former
12-cm Warner & Swasey altazimuth telescope	-77 04 04.39 +38 55 19.4	88	NA 1893-1934; former
20-cm Ross photographic zenith tube #1	-77 04 04.20 +38 55 19.8	88	NA 1915-05/1955; former
20-cm photographic zenith tube #3	-77 04 01.80 +38 55 19.8	84	NA 04/1956-10/1984; former
18-cm transit circle	-77 04 01.36 +38 55 16.8	89	NA 1955-67; to Yale-Col. Sta.; 1973-01/1994; to Black Birch Obs.
23-cm Clark transit circle	-77 04 01.36 +38 55 16.8	89	NA 10/1894-1945; former
13-cm photoheliograph	-77 03 59.44 +38 55 13.6	88	NA 1907-01/1972; former
63-mm meridian instrument	-77 04 01.08 +38 55 13.2	82	NA 1894-?
25-cm Fährand Automatic Transit Circle (ATC)	-77 04 01.36 +38 55 16.8	89	NA 1972-08/1976; to Flagstaff Station
35.6-cm NASM Celestron reflector	-77 04 01.08 +38 55 13.2	82	NA c.1994+; Natl. Air & Space Museum telescope
58-cm Clark refractor			Never mounted
4.5-m Base Earth Station (BEST) radio dish #1	-77 05 00.28 +38 55 13.8	----	G 05/1987-c.late 1993; former
4.5-m Base Earth Station (BEST) radio dish #2	-77 05 00.28 +38 55 13.8	----	G 08/1990+
4.5-m Base Earth Station (BEST) radio dish #3	-77 05 00.28 +38 55 13.8	----	G 04/1993+

USA—FLORIDA

Brevard Community College Observatory , Brevard Community College, Astronaut Memorial Space Science Center, 1519 Clearlake Road, Cocoa, Florida 32922			
61-cm Cassegrain reflector	-80 45 42.74 +28 23 04.4	17	NA c.1976+
40-cm Newtonian reflector	-80 45 46.08 +28 23 04.5	17	NA Former
32-cm Cassegrain reflector	-80 45 43.02 +28 23 03.5	17	NA
20-cm heliostat	-80 45 43.02 +28 23 04.1	17	NA c.1976+
30-cm Newtonian reflector	-80 45 42.91 +28 23 04.1	17	NA Former
20-cm Cassegrain reflector #1	-80 45 42.91 +28 23 04.1	17	NA c.1976+
20-cm Cassegrain reflector #2	-80 45 42.91 +28 23 04.1	17	NA c.1976+
15-cm Newtonian reflector (8)	-80 45 42.91 +28 23 04.1	17	NA c.1976+
15-cm refractor	-80 45 42.74 +28 23 04.4	17	NA 1989+
10-cm Newtonian reflectors (9)	-80 45 42.91 +28 23 04.1	17	NA 1988+
76-mm refractor #1	-80 45 42.91 +28 23 04.1	17	NA
76-mm refractor #2	-80 45 42.91 +28 23 04.1	17	NA
5-m radiometer	-80 45 42.91 +28 23 04.5	----	NA ?-1988; former

Rosemary Hill Observatory , University of Florida, Department of Astronomy, 211 Space Sciences Building, Gainesville, Florida 32611			
76-cm Tinsley Cassegrain/Newtonian reflector	-82 35 11.0 +29 23 59.4	44	NA 1970+
45-cm Ritchey-Chrétien Cassegrain reflector	-82 35 13 +29 24 03	41	NA 1974+
32-cm Cassegrain reflector			

University of Florida Radio Observatory , University of Florida, Department of Astronomy, 211 Space Sciences Building, Gainesville, Florida 32611			
640-dipole rectangular array	-83 02 04 +29 31 44	8	U c.1976+
20-dipole NS linear array			Former
7-element yagi			
5-element yagi (4)			1964+
5-element 18 MHz cross yagi			c.1966-c.1969; destroyed
5-element 22 MHz cross yagi			1986+
4-element log-spiral array			

USA—GEORGIA

Bradley Observatory, Agnes Scott College, Department of Astronomy, Decatur, Georgia 30030

76-cm Beck Fecker equatorial Cassegrain reflector -84 17 38.98 +33 45 54.8 316 NA Former; to Hard Labor Creek Obs.
35-cm Celestron telescope

Fernbank Observatory, Fernbank Science Center, 156 Heaton Park Drive N.E., Atlanta, Georgia 30307

90-cm Tinsley Ritchey-Chrétien Cassegrain reflector -84 19 05.3 +33 46 43.5 320 NA 1967+
12.7-cm Celestron reflector #1
12.7-cm Celestron reflector #2
20-cm Celestron Schmidt camera
28-cm Celestron reflector #1
28-cm Celestron reflector #2
15-cm Cave-Astrola reflector #1
15-cm Cave-Astrola reflector #2
10-cm Cave refractor
20-cm Celestron reflector #1
20-cm Celestron reflector #2
20-cm Celestron reflector #3

Hard Labor Creek Observatory, Georgia State University, Department of Physics and Astronomy, Atlanta, Georgia 30303

1-m Multi-Telescope Telescope (MuTT) -83 35 36.0 +33 40 13.8 223 S 11/1994+; nine 33-cm mirrors
40-cm CHARA Boller & Chivens Cassegrain reflector -83 35 36.0 +33 40 13.8 223 S From Kitt Peak Natl. Obs.
76-cm Beck Fecker Cassegrain reflector -83 35 36.0 +33 40 13.8 223 S Bradley Obs. telescope
20-cm portable Meade Schmidt/Cassegrain reflector #1 -83 35 36.0 +33 40 13.8 223 S 01/1991+
20-cm portable Meade Schmidt/Cassegrain reflector #2 -83 35 36.0 +33 40 13.8 223 S 01/1991+
32-cm portable Meade altazimuth telescope #1 -83 35 36.0 +33 40 13.8 223 S 05/1995+
32-cm portable Meade altazimuth telescope #2 -83 35 36.0 +33 40 13.8 223 S 05/1995+
20-cm portable Schmidt camera -83 35 36.0 +33 40 13.8 223 S 01/1991+

USA—HAWAII

Caltech Submillimeter Observatory, California Institute of Technology, P.O. Box 4339, Hilo, Hawaii 96720

10.4-m steerable parabolic radio dish -155 28 31.79 +19 49 20.8 4072 S1 11/1986+

Canada-France-Hawaii Telescope Corporation, P.O. Box 1597, Kamuela, Hawaii 96743

3.6-m CFH optical/infrared Cassegrain equat. reflector -155 28 07.95 +19 49 30.9 4204 S1 08/1979+

C.E.K. Mees Solar Observatory, University of Hawaii, Institute for Astronomy, 2680 Woodlawn Drive, Honolulu, (Oahu), Hawaii 98622

25-cm Perkin-Elmer coronagraph
15-cm photoheliograph
10-cm H _{α} flare patrol telescope
10-cm dual coronagraph
15-cm polarimeter-photometer
K-line patrol telescope
Former
Mounted on 3.7-m spar

Gemini North Observatory , Gemini Observatory Project, 670 A'ohoku Place, Hilo, Hawaii 96720			
8.1-m Gemini Ritchey-Chrétien altazimuth reflector	-155 28 08.57 +19 49 25.7	4213	S1 1998+
Joint Astronomy Centre , 665 Komohana Street, Hilo, Hawaii 96720			
3.8-m UK Grubb-Parsons IR Cass. eq. reflector (UKIRT)	-155 28 13.18 +19 49 20.8	4198	S1 1978+; UK/Dutch telescope
15-m J.C. Maxwell radio dish (JCMT)	-155 28 37.20 +19 49 22.1	4084	S1 12/1986+; UK/Dutch/Canadian telescope
LURE Observatory , University of Hawaii, Institute for Astronomy, P.O. Box 209, Kula, (Maui), Hawaii 96790			
41-cm lunastat telescope (transmitter)	-156 15 31.34 +20 42 37.4	3049	OH 1980+
multilens lurescope refractor (receiver)	-156 15 31.34 +20 42 38.1	3045	OH 10/1984+; eighty 19-cm lenses
50-cm SAO Baker-Nunn camera	-156 15 35.92 +20 42 37.5	3034	OH Former; Smithsonian Aph. Obs. telescope
Mauna Kea Observatory , University of Hawaii, Institute for Astronomy, 2680 Woodlawn Drive, Honolulu, (Oahu), Hawaii 96822			
2.24-m Cassegrain/Coudé reflector	-155 28 09.96 +19 49 22.8	4214	S1 11/1970+; Univ. of Hawaii telescope
61-cm Boller & Chivens Cassegrain reflector #1	-155 28 15.47 +19 49 17.8	4186	S1 11/1969+; NASA/Univ. of Hawaii telescope
61-cm Boller & Chivens Cassegrain reflector #2			05/1969+; USAF/Univ. of Hawaii telescope
3.2-m NASA infrared Cassegrain equat. reflector (IRTF)	-155 28 19.20 +19 49 34.4	4168	S1 05/1979+; NASA telescope
1-m infrared telescope			1977+; Austrian telescope
Subaru Telescope , 650 A'ohoku Place, Hilo, Hawaii 96720			
8.3-m Subaru optical-IR Ritchey-Chrétien telescope	-155 28 33.67 +19 49 31.8	4163	S1 1998+
W.M. Keck Observatory , California Association for Research in Astronomy, P.O. Box 220, Kamuela, Hawaii 96743			
10-m Keck I Ritchey-Chrétien altazimuth reflector	-155 28 29.0 +19 49 33.4	4160	S1 04/1992+; 36 1.8-m mirrors
10-m Keck II Ritchey-Chrétien altazimuth reflector	-155 28 27.24 +19 49 35.6	4160	S1 04/1996+; 36 1.8-m mirrors
USA—ILLINOIS			
Dearborn Observatory , Northwestern University, Department of Physics and Astronomy, 2131 Sheridan Road, Evanston, Illinois 60208-3112			
47-cm Clark refractor	-87 40 30 +42 03 24	195	NA 1889-?; museum
16.5-cm meridian circle			Former
USA—INDIANA			
Goethe Link Observatory , Indiana University, Department of Astronomy, 319 Swain Hall West, Bloomington, Indiana 47405			
90-cm Cassegrain reflector	-86 23 42.90 +39 32 57.7	300	NA 1938+
25-cm equatorial photographic reflector	-86 23 42.90 +39 32 57.7	300	NA 1948+
40-cm reflector	-86 26 23 +39 18 49	270	U 1965+
13-cm Zeiss apochromatic triple refractor			Former

USA—IOWA

Erwin W. Fick Observatory, Iowa State University, Department of Physics and Astronomy, Ames, Iowa 50011-3160

60-cm Mather Ealing Cassegrain/Coudé reflector	-93 56 27.0	+42 00 20.0	332	NA Spring 1970+
20-cm Celestron reflector	-93 56 27.0	+42 00 19.7	330	NA c.1976+
35-cm Celestron reflector	-93 56 27.2	+42 00 19.7	330	NA c.1978+
37-cm Cassegrain/Newtonian camera	-93 56 27.0	+42 00 20.0	332	NA c.1980+; mounted on 60-cm reflector

Grant O. Gale Observatory, Grinnell College, Department of Physics, Grinnell, Iowa 50112

61-cm DFM Cassegrain reflector	-92 43 12.1	+41 45 21.1	318	NA
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North Liberty Radio Observatory, University of Iowa, Department of Physics and Astronomy, North Liberty, Iowa 52242

18.3-m parabolic radio telescope	-91 34 28.5	+41 46 18	241	NA
25-m VLBA radio antenna	-91 34 26.35	+41 46 17.0	241	NA 1989+
8.6-m paraboloid				?-c.1987; former
11.4-m array				?-c.1987; former
1.2-m Cassegrain paraboloid				?-c.1987; former
16-element phased dipole array				?-c.1987; former
3-element yagi				?-c.1987; former
5-element yagi #1				?-c.1987; former
5-element yagi #2				?-c.1987; former

University of Iowa Observatory, University of Iowa, Department of Physics and Astronomy, 203 Van Allen Hall, Iowa City, Iowa 52242-1479

61-cm Boller & Chivens Cassegrain reflector	-91 33 36	+41 30 53	221	NA 1964+
31-cm reflector	-91 33 36	+41 30 53	221	NA 1964+

USA—KANSAS

Clyde W. Tombaugh Observatory, University of Kansas, Department of Physics and Astronomy, Lawrence, Kansas 66045-2151

8-cm transit instrument	-95 14 59.7	+38 57 33.4	323	A
68-cm William Pitt Newtonian reflector	-95 14 59.7	+38 57 33.4	323	A
15-cm Clark cometseeker refractor	-95 14 59.7	+38 57 33.4	323	A

10-cm transit instrument				
20-cm Celestron reflector #1				
20-cm Celestron reflector #2				
20-cm Celestron reflector #3				
57-mm Stackpole meridian transit instrument				
36-cm Celestron reflector				
20-cm Meade reflector #1				
20-cm Meade reflector #2				

Zenas Crane Observatory, Washburn University, Department of Physics and Astronomy, Stoffer Science Hall, 1700 College, Topeka, Kansas 66621

31-cm Brashear equatorial refractor	-95 41 47.6	+39 02 09.4	306	A
8-cm Fauth zenith telescope				?-06/1966; damaged/unusable
89-mm portable refractor				

USA—KENTUCKY

Moore Observatory, University of Louisville, 8000 Old Zaring Road, Crestwood, Kentucky 40014
 52.3-cm Cassegrain/Newtonian reflector -85 31 45 +38 20 04 216 NA 1978+
 35-cm Schmidt camera -85 31 45 +38 20 04 216 NA 1981+

USA—MARYLAND

GSFC Optical Test Site, NASA/Goddard Space Flight Center, Code 684.1, Observatories Section, Greenbelt, Maryland 20771
 91.5-cm Boller & Chivens Cassegrain/Coudé reflector -76 49 37.14 +39 01 15.9 53 NA 06/1969+
 1.22-m satellite tracking Coudé telescope -76 49 43.33 +39 01 16.9 53 NA c.1973+
 38-cm mobile Cassegrain reflector with laser -76 49 42.68 +39 01 15.3 53 NA Former
 46.6-cm Boller & Chivens reflector -76 49 41.27 +39 01 14.4 53 NA
 76.2-cm Cassegrain/Coudé telescope -76 49 41.27 +39 01 15.2 53 NA
 20.3-cm PTH-100 camera -76 49 40.05 +39 01 12.2 53 NA Former
 20.3-cm PTH-100 camera -76 49 40.07 +39 01 15.0 53 NA Former
 laser system -76 49 41.97 +39 01 13.7 55 NA Former
 2-element EW interferometer -76 49 33 +39 01 17 44 NA Former

Maryland Point Observatory, Naval Research Laboratory, Space Science Division, 4555 Overlook Avenue S.W., Washington, D.C. 20375-6343
 25.9-m parabolic reflector -77 13 51.14 +38 22 26.7 20 NA 08/1965+
 25.6-m parabolic reflector -77 13 57.44 +38 22 26.6 23 NA

University of Maryland Observatory, University of Maryland, Astronomy Program, College Park, Maryland 20742
 51-cm bent Cassegrain reflector -76 57 22.6 +39 00 07.0 53 NA Summer 1964+
 30-cm Cassegrain reflector -76 57 22 +39 00 07 58 NA 1968+
 20-cm astrograph -76 57 22 +39 00 07 58 NA Summer 1970+
 25-cm Schmidt/Cassegrain reflector -76 57 23 +39 00 07 ---- NA
 20-cm NASA reflector ?-Summer 1970
 15-cm heliostat Inactive
 6.1-m parabolic dish
 2-element interferometer

USA—MASSACHUSETTS

Five College Radio Astronomy Observatory, University of Massachusetts, 619-I Graduate Research Tower, Amherst, Massachusetts 01003
 13.7-m steerable mm-wavelength Cassegrain paraboloid -72 20 41 +42 23 31 314 NA 1976+
 6-element m-wavelength array -72 20 42 +42 23 33.2 306 NA 1971-1981; former; six 36.6-m dishes

George R. Wallace Jr. Astrophys. Obs., Mass. Inst. of Tech., 54-426 Dept. of Earth Sciences, 77 Massachusetts Avenue, Cambridge, Massachusetts 02139
 61-cm Ealing Cassegrain/Coudé reflector -71 29 05 +42 36 37 107 NA 1971+
 41-cm Cassegrain reflector -71 29 06 +42 36 37 107 NA 07/1970+
 25-cm reflector

Harvard College Observatory, Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, Massachusetts 02138

39-cm	Merz & Mahler equatorial visual refractor	-71 07 48	+42 22 47.6	24	NA	1849+
38-cm	Nadeau refractor	-71 07 43.9	+42 22 52.9	18	NA	
22-cm	Jewett Clark visual refractor					
19-cm	Clark refractor					1921-1927
1.52-m	Common reflector					
38-mm	Ross-Xpres telescope					1886-1947; to Sun Yat-Sen Univ. Obs.
28-cm	Draper Clark photographic refractor					1891-1919; former
13-cm	Voigtländer photographic telescope					Former
15-cm	Post visual refractor					1890-1907; former
38-cm	Draper reflector					1888-?; former
30-cm	Clark visual polar refractor					1848-?; to Oak Ridge Obs.
10.8-cm	Troughton & Simms meridian circle					
76-mm	transit instrument (4)					
21-cm	Clark transit circle					1870-?; former
10-cm	equatorial cometseeker					1845-1851
	Dollond cometseeker					c.1843-1851
						1844-?
7-cm	Troughton & Simms transit instrument					c.1839-?
11.4-cm	Merz-Simms equatorial refractor					1893-1895; to Boyden Station, Peru
60-cm	Bruce Clark double photographic refractor					1906-1932; to Oak Ridge Obs.
60-cm	Clark photographic refractor					1923-1938; to Oak Ridge Obs.
30-cm	Metcalf double photographic refractor					1909-1932; to Oak Ridge Obs.
40-cm	Metcalf double photographic refractor					1915-1918; to Boyden Station, Peru
25-cm	Metcalf photographic triplet					1888-1891; to Boyden Station, Peru
33-cm	Clark photographic refractor					1885-1888; to Boyden Station, Peru
20-cm	Bache photographic doublet					1889-1946
20-cm	Draper photographic doublet					1904-?
10-cm	Cooke photographic telescope					1889-1897
76-mm	Darlot photographic telescope					1928-1932; to Oak Ridge Obs.
76-mm	Ross-Fecker photographic telescope					1898-1934; to Oak Ridge Obs.
38-mm	Cooke photographic telescope					12/1987+; from Rutherford Obs.
1.2-m	radio dish					

Haystack Observatory, Northeast Radio Observatory Corporation, Route 40, Westford, Massachusetts 01886

36.6-m	parabolic radio antenna	-71 29 19.14	+42 37 23.5	146	NA	1964+
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Hopkins Observatory, Williams College, Astronomy Department, Williamstown, Massachusetts 01267-2565

18.1-cm	Clark refractor	-73 12 06	+42 42 43	215	NA	
12.5-cm	Carroll spar solar telescope					1972+
35-cm	reflector					1973+
20-cm	equatorial reflector #1					1972+
20-cm	equatorial reflector #2					1972+
11.4-cm	equatorial refractor					1900-1940; 1989+
89-mm	Troughton & Simms transit/zenith telescope					1876-1940; museum
60-cm	DFM Cassegrain telescope					
15-cm	Meade apochromatic refractor					

30-cm heliostat 1989+
 41-cm coelostat 1974+
 2.5-m radio telescope 1977+

Maria Mitchell Observatory, 3 Vestal Street, Nantucket, Massachusetts 02554

19-cm Cooke photographic triplet -70 06 18 +41 16 50 20 A 1913+
 20-cm Celestron reflector
 76-mm Zeiss altazimuth telescope
 89-mm Clark telescope
 12.7-cm Clark refractor #1 1859-?
 12.7-cm Clark refractor #2 To Vassar Col. Obs.

Millstone Hill Atmospheric Science Facility, Haystack Observatory, Westford, Massachusetts 01886

No instrument given -71 29 42 +42 36 36 146 NA
 67-m fixed zenith incoherent scatter antenna
 45.7-m steerable incoherent scatter antenna 1978+

Millstone Hill Radar Observatory, Massachusetts Institute of Technology, Lincoln Laboratory, P.O. Box 73, Lexington, Massachusetts 02173

25.6-m steerable high power L-band radar dish -71 29 29.02 +42 37 02.4 156 NA

Oak Ridge Observatory, Harvard-Smithsonian Center for Astrophysics, Harvard, Massachusetts 01451

1.55-m Wyeth Fecker Cassegrain/Newtonian reflector -71 33 29.32 +42 30 19.0 185 NA 1934+
 41-cm Metcalf double photographic refractor -71 33 29.7 +42 30 20.5 184 S 1932+; from Harvard Col. Obs.
 41-cm Boller & Chivens reflector 1975+
 16.5-cm Roe Clark visual refractor 1932-1963; former; from Harvard Col. Obs.
 76-mm Ross/Fecker photographic telescope 1938+
 30-cm Metcalf double photographic refractor Former
 32-mm Ross-Xpres patrol camera 1911-?; former
 10-cm Cooke patrol camera 1942-1957
 61/84-cm Jewett Perkin-Elmer Schmidt reflector Former; from Harvard Col. Obs.
 10-cm Voigtländer telescope 1934-1976
 20-cm Ross-Lundin telescope 1933-1963
 10-cm Ross-Lundin photographic telescope 1934-1957; former; from Harvard Col. Obs.
 38-mm Cooke photographic telescope ?-1962; inactive
 41-mm Damon patrol camera #1 ?-1962; inactive
 41-mm Damon patrol camera #2 ?-1962; inactive
 41-mm Damon patrol camera #3 1932-1953; former; from Harvard Col. Obs.
 61-cm Clark refractor
 22.9-cm geodetic-36 camera -71 33 31.29 +42 30 21.0 187 NA Former
 25.6-m equatorial radio antenna -71 33 30 +42 30 13 183 U Former
 20-m radio telescope
 18.3-m parabolic reflector 1956-?; former
 7.6-m radio antenna Former

Sagamore Hill Radio Observatory, Detachment 2, 4th Weather Wing, P.O. Box 2517, South Hamilton, Massachusetts 01982-0517

8.5-m equatorial parabolic antenna -70 49 15.15 +42 37 54.4 53 NA
 2.44-m equatorial parabolic antenna -70 49 15.15 +42 37 54.4 53 NA
 91-cm equatorial parabolic antenna -70 49 15.15 +42 37 54.4 53 NA

45-cm equatorial parabolic antenna	-70 49 15.15	+42 37 54.4	53	NA	Former
8.5-m equatorial parabolic antenna	-70 49 15.15	+42 37 54.4	53	NA	Former
45.7-m radio dish					Former
25.6-m radio dish					Former
2-element bicone interferometer					
3-element array					Former; three 1.83-m parabolooids

Westford Antenna Facility, Haystack Observatory, Westford, Massachusetts 01886

18.3-m radio antenna	-71 29 39.3	+42 36 46.4	115	NA	
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Whitin Observatory, Wellesley College, Wellesley, Massachusetts 02181

30-cm Fitz/Clark equatorial refractor	-71 18 11.56	+42 17 42.0	32	NA	1899+
61-cm Boller & Chivens reflector	-71 18 10.5	+42 17 34.8	48	A	1967+
15-cm Clark equatorial refractor	-71 18 11.02	+42 17 41.3	37	NA	1906+
10-cm Browning polar refractor					c.1906-1960's; former
8-cm Bamberg transit/zenith telescope					c.1900-c.1955; former
10-cm Questar reflector	-71 18 10.9	+42 17 41.3	37	NA	
Hale spectrohelioscope					1934+

USA—MICHIGAN

Central Michigan University Observatory, Central Michigan University, Brooks Hall, Mount Pleasant, Michigan 48859

35-cm Celestron Schmidt/Cassegrain reflector	-84 46 28.3	+43 35 15.3	258	NA	1977+
20-cm Celestron Schmidt reflector	-84 46 27.4	+43 35 14.7	255	NA	1977+
50-cm Star-Liner reflector	-84 46 28.3	+43 35 15.3	258	NA	1965-c.1973

Michigan State University Observatory, Michigan State University, Department of Physics and Astronomy, East Lansing, Michigan 48824-1116

61-cm Boller & Chivens Ritchey-Chrétien reflector	-84 29 00	+42 42 23	274	NA	
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University of Michigan Radio Astronomy Observatory, University of Michigan, 937 Physics-Astronomy Building, Ann Arbor, Michigan 48109-1090

26-m equatorial radio telescope	-83 56 10	+42 23 55.9	345	NA	1959+
8.5-m equatorial radio telescope	-83 56 07	+42 23 52.5	345	NA	
61/92-cm Curtis Warner & Swasey Schmidt reflector	-83 55 28.94	+42 24 10.7	321	U	?-1975; to Cerro Tololo Inter-Amer. Obs.
61-cm McMath reflector					?-c.1975
1.3-m Tinsley Cassegrain/Coudé reflector					?-c.1975; to McGraw Hill Kitt Peak Station

USA—MINNESOTA

O'Brien Observatory, University of Minnesota, School of Physics and Astronomy, 116 Church Street S.E., Minneapolis, Minnesota 55455

76-cm Astro Mechanics equatorial Cassegrain reflector	-92 46 36	+45 10 52	308	NA	
28-cm Herschelian reflector	-92 46 36	+45 10 52	308	NA	Former; mounted on 76-cm reflector
36-cm Schmidt reflector	-92 46 36	+45 10 52	308	NA	Mounted on 76-cm reflector
15-cm Schmidt reflector	-92 46 36	+45 10 52	308	NA	Former; mounted on 76-cm reflector

USA—MISSOURI

Morrison Observatory, Central Methodist College, Department of Physics and Astronomy, 700 Park Road, Fayette, Missouri 65248
 31-cm Clark equatorial refractor -92 41 47.4 +39 09 05.1 228 NA
 32-cm Brown reflector -92 41 47.4 +39 09 05.1 228 NA 1961+
 10-cm portable Clark refractor #1 -92 41 47.4 +39 09 05.1 228 NA
 10-cm portable Clark refractor #2 -92 41 47.4 +39 09 05.1 228 NA
 15-cm Troughton & Simms meridian circle -92 41 47.4 +39 09 05.1 228 NA
 64-mm refractor

USA—NEBRASKA

Behlen Observatory, University of Nebraska, Department of Physics and Astronomy, Lincoln, Nebraska 68588-0111
 76-cm Boller & Chivens Cassegrain reflector -96 26 49 +41 10 20 362 NA 1972+

USA—NEVADA

Maclean Observatory, Sierra Nevada College, Department of Astronomy, Incline Village, Nevada 89450
 56-cm Celestron Schmidt/Cassegrain reflector -119 55 41.18 +39 17 44.9 2546 NA
 35-cm Celestron Schmidt reflector -119 55 41.18 +39 17 44.9 2546 NA 01/1974+; attached to 56-cm reflector
 20-cm Celestron reflector -119 55 41.18 +39 17 44.9 2546 NA ?-01/1974; former; attached to 56-cm reflector
 20-cm Celestron Schmidt reflector -119 55 41.18 +39 17 44.9 2546 NA Attached to 56-cm reflector
 20-cm portable Celestron reflector

USA—NEW HAMPSHIRE

Shattuck Observatory, Dartmouth College, Department of Physics and Astronomy, Hanover, New Hampshire 03755
 24-cm Clark refractor -72 17 00.3 +43 42 15.3 183 NA 1871+
 10-cm Troughton & Simms meridian circle 1854+
 20-cm reflector Former
 76-mm Saegmüller transit instrument 1854+
 91-mm cometsceker Former; became guide of 24-cm refractor
 10-cm zenith sector
 76-mm portable telescope

USA—NEW JERSEY

Crawford Hill Observatory, AT&T Bell Laboratories, P.O. Box 400, Holmdel, New Jersey 07733
 7-m steerable Cassegrain radio antenna -74 11 11 +40 23 31 114 NA 07/1976+
 6.1-m horn reflecting antenna -74 11 11 +40 23 31 114 NA
 1.2-m heliostat

FitzRandolph Observatory, Princeton University, Peyton Hall, Princeton, New Jersey 08544-1001
91-cm Boller & Chivens reflector -74 38 46.7 +40 20 43.8 43 NA c.1966+

USA—NEW MEXICO

Apache Point Observatory, P.O. Box 59, 2001 Apache Point Road, Sunspot, New Mexico 88349
3.5-m ARC altazimuth reflector -105 49 11.56 +32 46 49.0 2781 NA
2.5-m SDSS Ritchey-Chrétien altazimuth reflector -105 49 +32 47 2800 U 05/1998+
1.0-m NMSU reflector New Mexico State Univ. telescope
1.8-m reflector 06/1990+; Univ. of Calgary telescope

Blue Mesa Station, New Mexico State Univ. Obs., New Mexico State Univ., Astronomy Dept. 4500, P.O. Box 30001, Las Cruces, New Mexico 88003
60-cm Astro Mechanics Cassegrain reflector -107 09 56.78 +32 29 28.7 2025 NA 1967+

Capilla Peak Observatory, University of New Mexico, Department of Physics and Astronomy, 800 Yale N.E., Albuquerque, New Mexico 87131
60-cm Boller & Chivens Cassegrain reflector -106 24 18 +34 41 48.0 2842 U 1967+

Corralitos Observatory, Northwestern University, P.O. Box 16314, Las Cruces, New Mexico 88004
61-cm Ferson Cassegrain reflector -107 02 33.0 +32 22 50.0 1453 NA
41-cm Cassegrain reflector -107 02 33 +32 22 52 1453 NA
15-cm Chrysler off-axis Schmidt reflector -107 02 33 +32 22 51 1447 NA 1972+
30-cm Cassegrain reflector -107 02 33 +32 22 51 1447 NA Mounted with 15-cm Chrysler reflector
15-cm folded optics Schmidt telescope

Joint Observatory for Cometary Research, New Mexico Institute of Mining & Technology, Campus Station, Socorro, New Mexico 87801
56/36-cm Schmidt camera -107 11 18.75 +33 59 05.3 3235 NA
41-cm Boller & Chivens Cass./Newt. reflector c.1971+; from Herndon Obs.

National Radio Astronomy Observatory, P.O. Box 0, Socorro, New Mexico 87801-0387
Very Large Array (VLA)
25-m VLBA radio antenna -107 37 03.82 +34 04 43.5 2124 NA 02/1978+; twenty seven 25-m antennas
25-m VLBA radio antenna -108 07 07.24 +34 18 03.6 2371 NA 1987+; Pie Town, New Mexico
25-m VLBA radio antenna -111 36 42.26 +31 57 22.4 1916 NA 1988+; Kitt Peak, Arizona
25-m VLBA radio antenna -106 14 42.01 +35 46 30.3 1967 NA 1988+; Los Alamos, New Mexico
25-m VLBA radio antenna -91 34 26.35 +41 46 17.0 241 NA 1989+; North Liberty, Iowa
25-m VLBA radio antenna -119 40 55.34 +48 07 52.8 255 NA 1989+; Brewster, Washington
25-m VLBA radio antenna -103 56 39.13 +30 38 05.6 1615 NA 1989+; Ft. Davis, Texas
25-m VLBA radio antenna -118 16 33.98 +37 13 54.2 1207 NA 1990+; Owens Valley, California
25-m VLBA radio antenna -64 35 02.61 +17 45 30.6 16 PR 1990+; St. Croix, Virgin Islands
25-m VLBA radio antenna -71 59 11.69 +42 56 01.0 309 NA 1991+; Hancock, New Hampshire
25-m VLBA radio antenna -155 27 28.95 +19 48 15.9 3720 OH 1991+; Mauna Kea, Hawaii

National Solar Observatory, Sacramento Peak, P.O. Box 62, Sunspot, New Mexico 88349

40-cm solar coronagraph	-105 49 09	+32 47 12	2811	U 1954+; on 7.92-m spar
10-cm coronagraph				1949-?; on 2.44-m spar
40-cm side-mounted solar coronagraph	-105 49 09	+32 47 12	2811	U 1976+; on 7.92-m spar
13-cm flare patrol telescope				1952+; on 3.05-m spar
15-cm multi-band sunspot telescope				1979+; on 3.05-m spar
15-cm white light patrol telescope				1954+; on 3.05-m spar
15-cm sunspot drawing telescope				1952+; on 3.05-m spar
76-cm solar vacuum tower telescope				10/1969+
30-cm coelostat				1960+
20-cm coronagraph				1980+; on 3.05-m spar
40-cm Doppler Zeeman analyzer	-105 49 09	+32 47 12	2811	U 1968+; on 7.92-m spar
30-cm Super-Schmidt meteor camera #1				Harvard Col. telescopes
30-cm Super-Schmidt meteor camera #2				Harvard Col. telescopes
55 mc radio telescope				Harvard Col./Cornell Univ. telescope
200 mc radio telescope				Harvard Col./Cornell Univ. telescope

Tortugas Mountain Station, New Mexico State Univ. Obs., New Mexico State Univ., Ast. Dept., P.O. Box 30001, Las Cruces, New Mexico 88003

61-cm Boller & Chivens Cassegrain reflector	-106 41 50.96	+32 17 34.6	1505	NA 1967+
30-cm photographic reflector	-106 41 46.58	+32 17 16.9	1453	NA ?-1967; former
41-cm Schmidt reflector	-106 41 46.58	+32 17 17.3	1453	NA c.1975+

USA—NEW YORK**C.E. Kenneth Mees Observatory, University of Rochester, Department of Physics and Astronomy, Rochester, New York 14627-0011**

60-cm Boller & Chivens Cassegrain reflector	-77 24 31.56	+42 42 01.0	701	NA
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Hartung-Boothroyd Observatory, Cornell University, Department of Astronomy, 512 Space Sciences Building, Ithaca, New York 14853-6801

63-cm Cassegrain reflector	-76 23 04.5	+42 27 29.3	534	NA 03/1977+
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Holden Memorial Observatory, Syracuse University, Department of Physics, 201 Physics Building, Syracuse, New York 13244-1130

20.3-cm Clark equatorial refractor	-76 08 18	+43 02 13.1	160	U 1887+
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12.7-cm Spencer equatorial refractor

15.2-cm Brashear cometseeker

76-mm Troughton & Simms transit instrument

10-cm refractor

Rutherford Observatory, Columbia University, Astronomy Department, Pupin Hall-Box 46, 538 West 120th Street, New York, New York 10027

32-cm Clark equatorial refractor	-73 57 30	+40 48 34.6	25	NA
33-cm equatorial photovisual refractor				1935-?; former
8-cm Wanschaff zenith telescope				Former
10-cm Bamberg transit instrument				Former
1.2-m radio dish				1975-1986; to Harvard Col. Obs.

USA—NORTH CAROLINA

Dark Sky Observatory, Appalachian State University, Dept. of Physics and Astronomy, Boone, North Carolina 28608
 80-cm DFM Ritchey-Chrétien reflector -81 24 44 +36 15 04 926 S Spring 1995+
 46-cm Cassegrain equatorial reflector
 40-cm Cassegrain Automatic Photometric Tel. (APT) 1981+
 40-cm Newtonian reflector

Morehead Observatory, University of North Carolina, Dept. of Physics and Astronomy, CB #3255 Phillips Hall, Chapel Hill, North Carolina 27599-3255
 1-cm Boller & Chivens Cassegrain reflector -79 03 01.87 +35 54 49.9 161 NA
 76-mm Simms transit instrument
 64-mm Simms altazimuth reflector
 64-mm Dollond telescope

Three College Observatory, University of North Carolina, Greensboro, North Carolina 27412-5001
 81-cm Cassegrain reflector -79 24 22.4 +35 56 40.8 183 NA 05/1981+

USA—OHIO

Cincinnati Observatory, University of Cincinnati, Cincinnati, Ohio 45221
 40-cm Clark equatorial refractor -84 25 21.0 +39 08 19.8 247 A 1904+
 10-cm Clark cometseeker -84 25 20.2 +39 08 19.7 247 NA
 28-cm Clark/Merz & Mahler equatorial refractor 1873+
 13-cm Fauth meridian circle 1888+
 76-mm Buff-Berger meridian transit instrument

Nassau Astronomical Observatory, Warner and Swasey Obs., Case Western Reserve Univ., 10900 Euclid Avenue, Cleveland, Ohio 44106-7215
 61/91-cm Burrell Schmidt reflector -81 04 30 +41 35 30 390 NA 1957-1979; to Warner & Swasey Kitt Peak Station
 91-cm Cassegrain reflector -81 04 30 +41 35 00 400 NA 05/1980+

Perkins Observatory, Ohio Wesleyan/Ohio State Universities, P.O. Box 449, Delaware, Ohio 43015
 81-cm Schottland Fecker Cassegrain reflector -83 03 19.2 +40 15 04.2 280 NA 1961+
 40/61-cm Schottland Fecker Schmidt camera -83 03 18 +40 15 01 270 NA 1961+
 1.75-m Warner & Swasey reflector -83 03 19.2 +40 15 04.2 280 NA 12/1931-1961; to Lowell Obs. Anderson Mesa Station
 20-cm Schottland Schmidt telescope Former
 24-cm refractor
 15-cm photographic double telescope

Ritter Observatory, University of Toledo, 2801 West Bancroft Street, Toledo, Ohio 43606
 1.02-m Warner & Swasey Ritchey-Chrétien Cass. refl. -83 36 48 +41 39 43 201 NA 1967+
 10-cm astrographic camera -83 36 48 +41 39 43 201 NA Former; mounted on 1.02-m reflector
 15-cm Brashear refractor

USA—PENNSYLVANIA

Allegheny Observatory, University of Pittsburgh, P.O. Box 7658, Observatory Station, Pittsburgh, Pennsylvania 15214

76-cm Thaw Brashear photographic equatorial refractor	-80 01 20.27 +40 28 58.1	380	A 1914+
33-cm Fitz/Clark equatorial visual refractor	-80 01 19.00 +40 28 57.9	379	A 1912+
76-cm Keeler Brashear Ritchey-Chrétien reflector	-80 01 18.99 +40 28 58.7	378	A 1906+
10-cm Troughton & Simms meridian circle	-80 01 20.88 +40 28 58.1	370	A c.1912-c.1938
10-cm Brashear refractor			c.1969-?; inactive

Black Moshannon Observatory, Pennsylvania State University, 525 Davey Laboratory, University Park, Pennsylvania 16802

1.6-m Astro Mechanics Cassegrain reflector	-78 00 15 +40 55 19	738	NA 1974+
61-cm Cassegrain reflector			1972-c.1984; to Penn State Univ.

Flower and Cook Observatory, Univ. of Pennsylvania, Dept. of Ast. and Astrophysics, 209 South 33rd Street, Philadelphia, Pennsylvania 19104-6394

72-cm Cassegrain/Newtonian reflector	-75 29 37 +39 59 57	155	NA From Cook Obs.
38-cm horizontal refractor	-75 29 38.1 +39 59 55.2	155	NA From Cook Obs.
25/38-cm Fecker Schmidt camera			?-1950's; former
76-mm transit instrument			?-1950's; former
68.6-cm Ruland Cassegrain reflector			Construction never completed

Kutztown University Observatory, Kutztown University, Physical Science Department, Kutztown, Pennsylvania 19530

46-cm Tinsley Cassegrain reflector	-75 47 06 +40 30 52	158	NA
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25-cm reflector

89-mm Questar reflector

12.7-cm Bausch & Lomb refractor

Sproul Observatory, Swarthmore College, Department of Physics and Astronomy, Swarthmore, Pennsylvania 19081

61-cm Brashear visual refractor	-75 21 24.3 +39 54 16.2	63	A 1911+
23-cm Brashear photographic doublet			1908-?; former
15-cm Clark equatorial refractor			Former
76-mm transit instrument			

Strawbridge Observatory, Haverford College, Department of Astronomy, Haverford, Pennsylvania 19041

57-mm Faugh zenith telescope	-75 18 12 +40 00 40.1	116	A 1883-1940; museum
95-mm transit instrument			1883-1942; museum
25/10-cm Clark equatorial photovisual telescope			1883+
21-cm Newtonian reflector			1888-1940
23-cm Fitz/Clark equatorial refractor			1851-c.1976
1.2-m 3-cm wavelength radio telescope	-75 18 00 +40 00 38	140	U 1970+

The Franklin Institute Observatory, The Franklin Institute, 20th and the Parkway, Philadelphia, Pennsylvania 19103

25-cm Zeiss equatorial refractor	-75 10 24 +39 57 27.6	30	G
61-cm Fecker equatorial reflector	-75 10 24 +39 57 27.6	30	G
cometseeker			
23-cm solar photographic reflector			

Villanova University Observatory, Villanova University, Department of Astronomy and Astrophysics, Villanova, Pennsylvania 19085

38-cm Cassegrain reflector -75 20 32 +40 02 17 145 NA
 25-cm Schmidt/Cassegrain reflector -75 20 32 +40 02 17 145 NA ?-1987
 16-cm refractor ?-1986

Wild T-4 theodolite

36-cm Schmidt/Cassegrain reflector #1
 36-cm Schmidt/Cassegrain reflector #2
 5.49-m 2000 MHz radio dish
 30 MHz radio antenna
 2.43-m 10 GHz radio telescope
 250 MHz interferometer

?-Summer 1989; former

?-Summer 1989; former

USA—RHODE ISLAND**Ladd Observatory, Brown University, P.O. Box 1843, 210 Doyle Avenue, Providence, Rhode Island 02912**

30-cm Brashear/Saegmüller equatorial reflector -71 23 59.2 +41 50 15.6 69 A 1891+
 30-cm Smiley Schwarzschild reflector c.1940+
 10-cm Schmidt camera c.1940+
 76-mm Saegmüller transit instrument 1891-1972
 89-mm Questar reflector (4) 1971+

USA—SOUTH CAROLINA**Melton Memorial Observatory, University of South Carolina, Department of Physics and Astronomy, Columbia, South Carolina 29208**

40-cm Brashear equat. Cassegrain/Newtonian reflector -81 01 35.78 +33 59 50.7 98 NA
 aerial camera Inactive; at off-campus site

University of South Carolina Radio Observatory, University of South Carolina. Department of Physics and Astronomy, Columbia, South Carolina 29208

5.5-m steerable Cassegrain dish -81 01 52 +33 59 46.7 127 NA
 3-m prime focus transit dish -81 01 52 +33 59 46.1 124 NA

USA—TENNESSEE**Arthur J. Dyer Observatory, Vanderbilt University, 1000 Oman Drive, Brentwood, Tennessee 37027**

61-cm Seyfert Baker Schmidt/Cassegrain reflector -86 48 19.05 +36 03 08.5 345 NA c.1953+
 30-cm DeWitt reflector -86 48 19.4 +36 03 08.4 345 U c.1971+

USA—TEXAS**George R. Agassiz Radio Station, Harvard-Smithsonian Center for Astrophysics, Fort Davis, Texas 79734**

26-m steerable paraboloid -103 56 47 +30 38 08 1603 NA 1961+
 8.5-m steerable paraboloid c.1956-Spring 1987; former

fixed broadside array
steerable log-periodic telescope

Former
?-1988; former

McDonald Observatory, University of Texas, P.O. Box 1337, Fort Davis, Texas 79734

2.72-m Harlan Smith Ritchey-Chrétien equatorial refl.	-104 01 17.60	+30 40 17.7	2075	NA 1969+	08/1949-04/1956; from Cook Obs. 1964+ Fall 1934-?; from Yerkes Obs.; to western mtn. slope On western slope of mountain ?-1940; former 1981+; on Mt. Fowlkes
2.1-m Struve Warner & Swasey reflector	-104 01 20.1	+30 40 17.7	2069	U 03/1939+	
91-cm Boller & Chivens Cassegrain reflector	-104 01 17.3	+30 40 16.6	2053	NA 02/1957+	
76-cm Boller & Chivens Cassegrain reflector	-104 01 20.0	+30 40 14.3	2050	NA 1970+	
18-cm reflector	-104 01 19.9	+30 40 25.0	2093	NA	
33-cm Cassegrain reflector					
20-cm Schmidt camera					
26-cm astrographic refractor					
76-mm fisheye patrol camera					
30-cm refractor					
30-cm refractor					
45.7-m spectrograph (coelostat)					06/1989+ U 1999+; on Mt. Fowlkes
76-cm laser ranging station					
15-cm ultraviolet telescope					
94-mm Schmidt camera					
61-cm Dobsonian telescope					
11-m Hobby-Eberly Telescope (HET)	-104 01	+30 41	2002	U	

Millimeter Wave Observatory, Balcones Research Center, Electrical Engineering Research Laboratory, 10100 Burnet Road, Austin, Texas 78758

4.85-m radio antenna	-104 01 39	+30 40 17.7	2031	U 1967+
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USA—VIRGINIA

Fan Mountain Observing Station, Leander McCormick Observatory, University of Virginia, P.O. Box 3818, Charlottesville, Virginia 22903

1.02-m Baker Schmidt/Cassegrain reflector	-78 41 33.28	+37 52 41.2	566	NA 08/1972+
81-cm Tinsley Cassegrain reflector	-78 41 32.89	+37 52 40.1	554	NA 1964+
25-cm Cooke/Fecker astrographic triplet				1971-1976, 1983+; from L. McCormick Obs.

Leander McCormick Observatory, University of Virginia, P.O. Box 3818, Charlottesville, Virginia 22903

68-cm Clark equatorial refractor	-78 31 22.16	+38 01 57.5	264	NA 1885+
15-cm Clark/Saegmüller visual refractor	-78 31 21.1	+38 01 57.8	262	NA 1895+; from Univ. of Va. Students' Obs.
20-cm Tinsley Cassegrain reflector	-78 31 21.1	+38 01 57.8	262	NA ?-1980
25-cm Cooke/Fecker astrographic triplet	-78 31 21.1	+38 01 57.8	262	NA 1935-1955; to Fan Mtn. Obs.
20-cm Celestron reflector	-78 31 21.1	+38 01 57.8	262	NA 1980+
10-cm Kahler refractor				From Univ. of Va. Students' Obs.
8-cm Fauth meridian transit telescope				Museum

USA—WASHINGTON

Manastash Ridge Observatory, University of Washington, Astronomy Department FM-20, Seattle, Washington 98195

76-cm Boller & Chivens equatorial Cassegrain reflector	-120 43 24	+46 57 04	1198	NA	05/1972+
20-cm reflector	-120 43 24	+46 57 04	1198	NA	Former
41-cm telescope					Former

USA—WEST VIRGINIA

National Radio Astronomy Observatory, P.O. Box 2, Green Bank, West Virginia 24944-0002

4-element interferometer	-79 50 31.40	+38 25 47.2	836	NA	
3-element interferometer					
26-m Tatel steerable equatorial radio telescope	-79 49 42.25	+38 26 08.7	858	NA	03/1959+
26-m movable radio telescope #1					1958+; three 26-m radio telescopes
26-m movable radio telescope #2					
92-m steerable parabolic transit radio telescope	-79 50 56.36	+38 25 46.3	894	NA	10/1962-11/1988; destroyed
42.7-m steerable equatorial parabolic radio telescope	-79 50 09.61	+38 26 15.4	881	NA	05/1965+
13.7-m altazimuth radio telescope	-80 00 41	+38 09 12	1066	NA	Huntersville site
14.2-m radio telescope					At Montersville site
20-m radio telescope	-79 49 31.87	+38 26 12.7	842	NA	1995+
L=36.6-m calibration horn antenna					
6.1-m parabolic radio telescope					Former
3.66-m radio telescope					1958+
1.22-m radio horn					
9.45-m Reber altazimuth parabolic radio telescope					
Ewen radio horn					
100-m GBT steerable radio telescope					

NRL Radio Observatory, Naval Research Laboratory, Sugar Grove, West Virginia 26815

45.7-m altazimuth radio telescope	-79 16 23	+38 31 14	705	NA
18.3-m radio telescope	-79 16 36	+38 31 16	698	NA

USA—WISCONSIN

Pine Bluff Observatory, University of Wisconsin, 4065 Observatory Road, Cross Plains, Wisconsin 53528

91-cm Boller & Chivens Cassegrain reflector	-89 41 07	+43 04 41	366	NA	
41-cm reflector	-89 40 18	+43 04 38.0	360	U	Replaced 30-cm telescope
30-cm telescope	-89 40 18	+43 04 39.7	360	U	Former

Thompson Observatory, Beloit College, Department of Physics and Astronomy, 700 College Street, Beloit, Wisconsin 53511

56-cm Celestron Cassegrain reflector	-89 01 51	+42 30 16.5	255	NA	1967+
25-cm portable Celestron reflector (9)					1967+
51-mm portable refractor #1					From Smith Obs., Beloit
51-mm portable refractor #2					From Smith Obs., Beloit
76-mm portable refractor					From Smith Obs., Beloit; on display

Washburn Observatory, University of Wisconsin, Department of Astronomy, 475 North Charter Street, Madison, Wisconsin 53706-1582

40-cm Clark refractor -89 24 28.5 +43 04 36.8 292 NA 1879+
 15-cm Clark refractor 1882+
 12-cm Clark-Repsold meridian circle 1881-1988; former
 76-mm Fauth meridian transit instrument ?-1988; former
 25-cm Astroworks folded refractor

Yerkes Observatory, University of Chicago, P.O. Box 258, 373 West Geneva Street, Williams Bay, Wisconsin 53191-0258

1.02-m Clark/Warner & Swasey equatorial refractor -88 33 24.6 +42 34 13.4 334 NA 05/1897+
 1.04-m Ritchey-Chr tien Cassegrain/Coud  refractor -88 33 15.1 +42 34 12.2 329 U 10/1968+
 60-cm Cassegrain reflector -88 33 15.1 +42 34 13.1 328 U 02/1964+
 15-cm Brashear cometseeker -88 33 23.7 +42 34 13.2 334 NA
 30-cm Kenwood Warner & Swasey photovisual refractor
 14.5-cm Zeiss equatorial photographic doublet spectrohelioscope
 76-mm broken-tube transit instrument
 25-cm Bruce Brashear astrographic camera
 60-cm Ritchey reflector -88 33 15.1 +42 34 12.2 329 U Former
 Snow ccelostat Fall 1903+

USA—WYOMING

Wyoming Infrared Observatory, University of Wyoming, Box 3905, University Station, Laramie, Wyoming 82071

2.3-m Cassegrain reflector -105 58 35.5 +41 05 53.4 2943 NA 10/1977+

URUGUAY

Los Molinos Astronomical Observatory, Camino de Los Molinos 5769, 12400 Montevideo, Uruguay

35-cm reflector -56 11 25 -34 45 19 110 S

Montevideo Observatory, Casilla de Correo 867, Montevideo, Uruguay

20-cm Zeiss equatorial refractor -56 10 27 -34 54 19 62 A

UZBEKISTAN

Tashkent Observatory, Astronomical Institute, Ul. Astronomiceskaja 33, 700052 Tashkent, Uzbekistan

10-cm visual transit instrument +69 17 37.1 +41 19 30.4 477 A
 34-cm astrograph +69 17 37 +41 19 30 470 A
 15-cm Merz refractor +69 17 38.5 +41 19 30.7 475 A
 15-cm Ganza refractor +69 17 38.5 +41 19 30.7 475 A
 61-mm Zeiss refractor +69 17 41.2 +41 19 29.3 457 U
 12.7-cm Reinfelder-Hertel cometseeker +69 17 38.5 +41 19 36.7 475 A
 8-cm portable altazimuth instrument +69 17 39.7 +41 19 42.9 475 A
 10-cm Zeiss refractor +69 17 41.4 +41 19 32.0 457 U

Maksutov telescope	+69 17 37.2	+41 19 33.3	475	A
7-cm portable Fraunhofer refractor	+69 17 42.7	+41 19 30.8	457	U
35-cm refractor	+69 17 37.1	+41 19 30.4	477	A
7-cm Dollond refractor	+69 17 41.8	+41 19 31.3	457	U
21.5-cm refractor	+69 17 42.0	+41 19 31.3	457	U
16.2-cm refractor	+69 17 42.0	+41 19 31.3	457	U
89-mm Zeiss refractor	+69 17 42.0	+41 19 31.3	457	U
95-mm refractor	+69 17 42.0	+41 19 31.3	457	U
13.5-cm refractor	+69 17 42.0	+41 19 31.3	457	U
10.8-cm refractor	+69 17 42.0	+41 19 31.3	457	U
6-cm refractor	+69 17 42.0	+41 19 31.3	457	U
65-mm refractor	+69 17 42.0	+41 19 31.3	457	U
76-mm Mailhat refractor	+69 17 42.0	+41 19 31.3	457	U
10-cm photoelectric transit instrument	+69 17 37.32	+41 19 00	----	A
64-mm portable telescope	+69 17 38.5	+41 19 36.7	475	A
12-cm meridian circle				
76-mm portable refractor				

Uluk-Bek Latitude Station, 731740 Kitab, Uzbekistan

11-cm zenith telescope	+66 52 55	+39 08 01.8	658	A
10-cm refractor	+66 52 55	+39 08 01.6	658	A
5-cm refractor	+66 52 55	+39 08 01.6	658	A
zenith telescope	+67 00	+39 08 00.3	----	A
photographic zenith tube	+66 53 00.00	+39 08 00.3	----	A

VATICAN CITY STATE

Vatican Observatory, Castel Gandolfo, V-00120 Vatican City State (Italy)	+12 39 04.95	+41 44 47.4	450	G 1935+; mounted with 40-cm refr. (double astrograph) 1935+; mounted with 60-cm refl. (double astrograph) 1935+ 1939+; from Papal Gardens 1961+
60-cm Zeiss Newtonian/Cassegrain reflector				
40-cm Zeiss quadruple photographic refractor				
40-cm visual refractor				
33-cm Carte du Ciel astrograph				
63/98-cm Schmidt reflector				

VENEZUELA

Cagigal Observatory, La Planicie, Apartado Postal 6745, Caracas 1030, Venezuela	-66 55 44.05	+10 30 22.4	1026	A ?-1969
photographic zenith tube	-66 55 49.19	+10 30 22.6	1040	A ?-1969
19-cm Askania meridian circle	-66 55 49.19	+10 30 22.4	1040	A ?-1969
10-cm Askania meridian circle	-66 55 44.4	+10 30 22.8	1046	SA ?-1962
20-cm refractor	-66 55 51.6	+10 30 22.5	1041	A c.1975+
35-cm Schmidt camera	-66 55 51.6	+10 30 22.5	1041	A c.1975+
35-cm Schmidt/Cassegrain reflector	-66 55 51.6	+10 30 22.5	1041	A c.1975+
20-cm Schmidt/Cassegrain reflector	-66 55 48.19	+10 30 23.4	----	LC 1959+
65-cm Zeiss equatorial refractor				

50-cm double astrograph
1.0-m Askania Schmidt camera
1.52-m Askania Schmidt reflector
1.0-m Cassegrain/Coudé reflector

Llano del Hato Observatory, Center of Astronomical Investigation, Apartado 264, Mérida 5101-A, Venezuela

1.0/1.52-m Askania Schmidt equatorial telescope	-70 52 01	+8 47 26	3610	A 1976+
1-m Zeiss Coudé reflector	-70 51 59	+8 47 34	3610	A 1976+
65-cm Zeiss visual refractor	-70 52 01	+8 47 30	3610	A 1976+
50/50-cm Zeiss twin astrophotometer	-70 51 58	+8 47 24	3610	A

Name	Location	Name	Location
A.A. Zhdanov State Univ.	Russia	Bappu Obs., Vainu	India
Abastumani	Georgia	Barreal	Argentina
Abastumani Astrophysical Obs.	Georgia	Barros Obs., Prof. Manuel de	Portugal
Abrahão de Moraes Obs.	Brazil	Barstow	California (USA)
Agassiz Radio Station, George R.	Texas (USA)	Basle Univ. Astronomical Inst.	Switzerland
Agnes Scott College	Georgia (USA)	Basle, Univ. of	Switzerland
Aguiar Obs., Félix	Argentina	Bayrischzell	Germany
Air Force Academy, U.S.	Colorado (USA)	Behlen Obs.	Nebraska (USA)
Air Force Academy Obs., U.S.	Colorado (USA)	Beijing	China (PRC)
Alabama Obs., Univ. of	Alabama (USA)	Beijing Normal Univ.	China (PRC)
Alabama, Univ. of	Alabama (USA)	Beijing Normal Univ. Obs.	China (PRC)
Alberta, Univ. of	Canada	Beijing Obs. Miyun Station	China (PRC)
Albuquerque	New Mexico (USA)	Beijing Obs. Shahe Station	China (PRC)
Alger	Algeria	Beijing Obs. Tianjing Station	China (PRC)
Alger Obs.	Algeria	Beijing Obs. Xinglong Station	China (PRC)
Alger, Univ. of	Algeria	Bell Laboratories, AT&T	New Jersey (USA)
Algonquin Radio Obs.	Canada	Belo Horizonte	Brazil
Allegheny Obs.	Pennsylvania (USA)	Beloit	Wisconsin (USA)
Aller Obs., Ramon Maria	Spain	Beloit College	Wisconsin (USA)
Alma-Ata	Kazakhstan	Bergedorf (see Hamburg Obs.)	Germany
Almeria	Spain	Berkeley	California (USA)
Amado	Arizona (USA)	Berlin	Germany
Ames	Iowa (USA)	Berne	Switzerland
Amherst	Massachusetts (USA)	Berne Univ.	Switzerland
A. Mickiewicz Univ.	Poland	Besançon	France
Anacapri	Italy	Besançon Obs.	France
Anderson Mesa Station	Arizona (USA)	Besevier	Turkey
Anglo-Australian Obs.	Australia	Bialkow Station	Poland
Ankara	Turkey	Bickley	Australia
Ankara Obs., Univ. of	Turkey	Big Bear City	California (USA)
Ankara, Univ. of	Turkey	Big Bear Solar Obs.	California (USA)
Ann Arbor	Michigan (USA)	Big Pine	California (USA)
Antares Obs.	Brazil	Binnigea	Switzerland
Apache Point Obs.	New Mexico (USA)	Bjornstorp (see Javan Station)	Sweden
Arcetri Astrophysical Obs.	Italy	Black Birch Station	New Zealand
Archehold Obs.	Germany	Black Moshanaoa Obs.	Pennsylvania (USA)
Arecibo	Puerto Rico	Blaheim	New Zealand
Arecibo Obs.	Puerto Rico	Bloemfontein	South Africa
Argentine Radio Astronomy Inst.	Argentina	Bloomington	Indiana (USA)
Århus	Denmark	Blue Mesa Station	New Mexico (USA)
Århus Univ.	Denmark	Bochum	Germany
Arizona Univ. Obs., Northern	Arizona (USA)	Bochum Obs.	Germany
Arizona Univ., Northern	Arizona (USA)	Bogazici Univ.	Turkey
Arizona, Univ. of	Arizona (USA)	Bogotá	Colombia
Armagh	United Kingdom	Bohyunsan Obs.	Korea (ROK)
Armagh Obs.	United Kingdom	Bologna	Italy
Arosa	Switzerland	Bologna Univ.	Italy
Arosa Astrophysical Obs.	Switzerland	Bologna Univ. Obs.	Italy
Arthur J. Dyer Obs.	Tennessee (USA)	Bonn	Germany
Asiago	Italy	Bonn Univ. (see Hoher List Obs.)	Germany
Asiago Astrophysical Obs.	Italy	Bonn Univ. (see Stockert Radio Obs.)	Germany
Assoc. for Research in Ast., California (CARA)	Hawan (USA)	Boone (see Erwin W. Fick Obs.)	Iowa (USA)
Astronomical and Astrophysical Inst.	Belgium	Bordeaux Univ.	France
Astronomical and Geophysical Inst.	Brazil	Bordeaux Univ. Obs.	France
Astrophysical Inst. of the Canaries (IAC)	Spain	Bornova-Izmir	Turkey
AT&T Bell Laboratories	New Jersey (USA)	Borowiec	Poland
Athens	Greece	Bosque Alegre Astrophysical Station	Argentina
Atheas Kryonerion Station, National Obs. of	Greece	Bosscha Obs.	Indonesia
Atheas Pentele Station, National Obs. of	Greece	Boulder	Colorado (USA)
Athens, National Obs. of	Greece	Bouzaréa	Algeria
Atubara	Brazil	Boyden Obs.	South Africa
Atlanta	Georgia (USA)	Bradley Obs.	Georgia (USA)
Auckland	New Zealand	Brannenburgh (see Wendelstein Solar Obs.)	Germany
Auckland Obs.	New Zealand	Bratislava	Slovakia
Austin	Texas (USA)	Breatwood	Tennessee (USA)
Australia Telescope National Facility	Australia	Brera-Milan Obs.-Merate	Italy
Australian National Radio Obs.	Australia	Brera-Milan Obs.-Milan	Italy
Australian National Univ.	Australia	Brevard Community College	Florida (USA)
		Brevard Community College Obs.	Florida (USA)
Bagnères-de-Bigorre	France	Bristol Springs (see C.E. Kenneth Mees Obs.)	New York (USA)
Bailey (see Dick Mountain Station)	Colorado (USA)	Brno	Czech Republic
Balcones Research Center	Texas (USA)	Bro	Sweden
Bamberg	Germany	Broederstroom	South Africa
Bandung Inst. of Technology	Indonesia	Bronson (see Rosemary Hill Obs.)	Florida (USA)
Bangalore	India	Brooklyn (see Goethe Link Obs.)	Indiana (USA)

Name	Location	Name	Location
Brorfelde	Denmark	Central Inst. for Earth Physics	Germany
Brown Univ.	Rhode Island (USA)	Central Inst. for Solar-Terrestrial Physics	Germany
Brownsboro (see Moore Obs.)	Kentucky (USA)	Central Methodist College	Missouri (USA)
Brussels	Belgium	Central Michigan Univ.	Michigan (USA)
Brussels, Open Univ. of	Belgium	Central Michigan Univ. Obs.	Michigan (USA)
Bucharest	Romania	Cerro Calán National Obs.	Chile
Bucharest Obs.	Romania	Cerro El Roble Obs.	Chile
Budapest	Hungary	Cerro La Silla (see European Southern Obs.)	Chile
Buenos Aires	Argentina	Cerro Las Campanas (see Las Campanas Obs.)	Chile
Bungendore (see Molonglo Radio Obs.)	Australia	Cerro Paranal	Chile
Byurakan	Armenia	Cerro Tololo Inter-American Obs.	Chile
Byurakan Astrophysical Obs.	Armenia	Cesco Station, Dr. Carlos U.	Argentina
Cagigal Obs.	Venezuela	Chabot Obs.	California (USA)
Cagliari	Italy	Chalmers Technical Univ.	Sweden
Cagliari Obs.	Italy	Chamberlin Obs.	Colorado (USA)
Cairo	Egypt	Chamberlin Obs. Dick Mountain Station	Colorado (USA)
Calán National Obs., Cerro	Chile	Chaonis Obs.	Italy
Calar Alto (see German Spanish Ast. Centre)	Spain	Chapel Hill	North Carolina (USA)
Calern Station	France	Charles Univ.	Czech Republic
Calgary	Canada	Charles Univ. Astronomical Inst.	Czech Republic
Calgary, Univ. of	Canada	Charlottesville	Virginia (USA)
California Assoc. for Research in Ast. (CARA)	Hawaii (USA)	Chavannes-des-Bois	Switzerland
California Inst. of Technology	California (USA)	Chews Ridge (see MIRA Oliver Station)	California (USA)
California Inst. of Technology	Hawaii (USA)	Chicago, Univ. of	Wisconsin (USA)
California State Univ.	California (USA)	Chilbolton	United Kingdom
California, Univ. of	Arizona (USA)	Chilbolton Obs.	United Kingdom
California, Univ. of	California (USA)	Chile, Univ. of	Chile
Calingasta	Argentina	Chimbas	Argentina
Caltech Submillimeter Obs.	Hawaii (USA)	Chinese Academy of Sciences	China (PRC)
Cambridge	Massachusetts (USA)	Chions	Italy
Cambridge	United Kingdom	Chung-li	Taiwan (ROC)
Cambridge Univ.	United Kingdom	Chungbuk	Korea (ROK)
Cambridge Univ. Observatories	United Kingdom	Cincinnati	Ohio (USA)
Canada-France-Hawaii Telescope Corp.	Hawaii (USA)	Cincinnati Obs.	Ohio (USA)
Cananea	Mexico	Cincinnati, Univ. of	Ohio (USA)
Canaries, Astrophysical Inst. of the (IAC)	Spain	City Obs.	United Kingdom
Canberra (see Mount Stromlo Obs.)	Australia	Cleveland	Arizona (USA)
Cantonal Obs.	Switzerland	Cleveland	Ohio (USA)
Cape Town (see South African Obs.)	South Africa	Climenhaga Obs.	Canada
Capilla de Caleu (see Cerro El Roble Obs.)	Chile	Cluj-Napoca	Romania
Capilla Peak Obs.	New Mexico (USA)	Cluj-Napoca Obs.	Romania
Capodimonte Obs.	Italy	Clyde W. Tombaugh Obs.	Kansas (USA)
Capoterra (see Cagliari Obs.)	Italy	Cocoa	Florida (USA)
Caracas	Venezuela	Coimbra	Portugal
Carloforte	Italy	Coimbra Obs.	Portugal
Carlos U. Cesco Station, Dr.	Argentina	Coimbra Univ.	Portugal
Carnegie Institution of Washington	Chile	Cointe Obs.	Belgium
Carter Obs.	New Zealand	College Park	Maryland (USA)
Carter Obs. Black Birch Station	New Zealand	Collurana Obs.	Italy
Case Western Reserve Univ.	Arizona (USA)	Colombia, National Univ. of	Colombia
Case Western Reserve Univ.	Ohio (USA)	Colorado Springs	Colorado (USA)
Cassel	California (USA)	Colorado, Univ. of	Colorado (USA)
Castel Gandolfo	Vatican City State	Columbia	South Carolina (USA)
Castleknoek	Ireland	Columbia Univ.	New York (USA)
Catalina Station	Arizona (USA)	Columbus	Ohio (USA)
Catania Astrophysical Obs.	Italy	Commonwealth Sci. & Ind. Rsch. Org. (CSIRO)	Australia
Catania Astrophysical Obs. Stellar Station	Italy	Communications Research Laboratory	Japan
Catania	Italy	Connecticut State Univ. Obs., Western	Connecticut (USA)
Catania Univ.	Italy	Connecticut State Univ., Western	Connecticut (USA)
Catholic Univ.	Netherlands	Cook Obs., Flower and	Pennsylvania (USA)
Catholic Univ. Astronomical Inst.	Netherlands	Coonabarabran	Australia
Catholic Univ., Pontifical	Chile	Copenhagen	Denmark
Caussols	France	Copenhagen Univ.	Denmark
Cebreros	Spain	Copenhagen Univ. Obs.-Brorfelde	Denmark
C.E.K. Mees Solar Obs.	Hawaii (USA)	Copenhagen Univ. Obs.-Ostervold	Denmark
C.E. Kenneth Mees Obs.	New York (USA)	Copernicus Obs., Nicholas	Czech Republic
Çengelköy	Turkey	Copernicus Univ., Nicolaus	Poland
Center for Astronomy and Space Science	Romania	Córdoba	Argentina
Center for Astrophysics, Harvard-Smithsonian	Arizona (USA)	Córdoba, National Univ. of	Argentina
Center for Astrophysics, Harvard-Smithsonian	Massachusetts (USA)	Córdoba Obs.	Argentina
Center for Astrophysics, Harvard-Smithsonian	Texas (USA)	Córdoba Obs. Bosque Alegre Station	Argentina
Center for Radar Astronomy, Stanford	California (USA)	Cornell Univ.	New York (USA)
Center of Astronomical Investigation	Venezuela	Corralitos Obs.	New Mexico (USA)
Central Inst. for Astrophysics	Germany	Côte d'Azur Obs.	France
		Côte d'Azur Obs. Calern Station	France

Name	Location	Name	Location
Cracow	Poland	Fayette	Missouri (USA)
Crane Obs., Zenas	Kansas (USA)	Federal Inst. of Technology, Swiss	Switzerland
Crawford Hill Obs.	New Jersey (USA)	Federal Obs., Swiss	Switzerland
Crestwood	Kentucky (USA)	Federal Univ. of Minas Gerais	Brazil
Crimea	Ukraine	Federal Univ. Rio Grande do Sol	Brazil
Crimean Astrophysical Obs.-Partizanskoye	Ukraine	Feira de Santana	Brazil
Crimean Astrophysical Obs.-Simeis	Ukraine	Feira de Santana State Univ.	Brazil
Cross Plains	Wisconsin (USA)	Félix Aguilar Obs.	Argentina
Culgoora (see Australia Tel. Natl. Facility)	Australia	Fernbank Obs.	Georgia (USA)
Czech Republic Academy of Sciences	Czech Republic	Fernbank Science Center	Georgia (USA)
Daeduk Radio Obs.	Korea (ROK)	Fesenkov Astrophysical Inst., V.G.	Kazakhstan
Daegang	Korea (ROK)	Fick Obs., Erwin W.	Iowa (USA)
Damecuta Obs.	Italy	Figl Astrophysical Obs., L.	Austria
Dabury	Connecticut (USA)	FitzRandolph Obs.	New Jersey (USA)
Dark Sky Obs.	North Carolina (USA)	Five College Radio Obs.	Massachusetts (USA)
Dartmouth College	New Hampshire (USA)	Flagstaff	Arizona (USA)
Dawn	Germany	Flagstaff Station	Arizona (USA)
David Dunlap Obs.	Canada	Fleurs Radio Obs.	Australia
Dearborn Obs.	Illinois (USA)	Floirac	France
Debrecen	Hungary	Florence	Italy
Decatur	Georgia (USA)	Florence and George Wise Obs., The	Israel
Deep Space Station-Ceberos	Spain	Florence Univ.	Italy
Deep Space Station-Robledo	Spain	Florida Radio Obs., Univ. of	Florida (USA)
Deep Space Station-Tidbinbilla	Australia	Florida, Univ. of	Florida (USA)
Delaware	Ohio (USA)	Flower and Cook Obs.	Pennsylvania (USA)
Denver	Colorado (USA)	Foerster Obs., Wilhelm	Germany
Denver, Univ. of	Colorado (USA)	Forcalquier	France
Devon Obs.	Canada	Fort Davis	Texas (USA)
Dexter (see Michigan Radio Obs., Univ. of)	Michigan (USA)	Fort Irwin (see Goldstone Complex)	California (USA)
Dick Mountain Station	Colorado (USA)	Fort Skala Station	Poland
Dodaira Obs.	Japan	Foster Astrophysical Obs., Manuel	Chile
Domaine Univ.	France	Fournier Univ., Joseph	France
Dominion Astrophysical Obs.	Canada	Franklin Inst. Obs., The	Pennsylvania (USA)
Domion Radio Astrophysical Obs.	Canada	Franklin Inst., The	Pennsylvania (USA)
Dr. Carlos U. Cesco Station	Argentina	Franzens Univ., Karl	Austria
Dresden	Germany	Fred L. Whipple Obs.	Arizona (USA)
Dresden Technical Univ.	Germany	Freiburg-im-Breisgau	Germany
Dublin	Ireland	Friedrich Schiller Univ.	Germany
Dundee	United Kingdom	Friedrich Schiller Univ. Obs.	Germany
Dunlap Obs., David	Canada	Friedrich Wilhelms Univ.	Germany
Dunsink Obs.	Ireland	Fujigane Station	Japan
Dushanbe	Tadzhikistan		
Dwingeloo	Netherlands	Gainesville	Florida (USA)
Dwingeloo Radio Obs.	Netherlands	Gale Obs., Grant O.	Iowa (USA)
Dyer Obs., Arthur J.	Tennessee (USA)	Gauribidanur Radio Obs.	India
		Gemini North Obs.	Hawaii (USA)
East Lansing	Michigan (USA)	Geneva Obs.	Switzerland
Ebro Obs.	Spain	Geodetical Faculty Obs.	Croatia
Edinburgh	United Kingdom	George R. Agassiz Radio Station	Texas (USA)
Edmonton	Canada	George R. Wallace Jr. Astrophysical Obs.	Massachusetts (USA)
Effelsberg Radio Obs.	Germany	George Wise Obs., The Florence and	Israel
Ege Univ.	Turkey	Georgia State Univ.	Georgia (USA)
Ege Univ. Obs.	Turkey	Georgia Academy of Sciences	Georgia
Einstein Tower Solar Obs.	Germany	German Spanish Astronomy Centre	Spain
EISCAT Kiruna Station	Sweden	Glasgow	United Kingdom
EISCAT Sodankylä Station	Finland	Glasgow Obs., Univ. of	United Kingdom
EISCAT Tromsø Station	Norway	Glasgow, Univ. of	United Kingdom
Elginfield Obs.	Canada	Goddard Space Flight Center (GSFC)	Maryland (USA)
El Leoncito (see Dr. Carlos U. Cesco Station)	Argentina	Godlee Obs.	United Kingdom
El Leoncito Astronomical Complex	Argentina	Goethe Link Obs.	Indiana (USA)
El Roble Obs., Cerro	Chile	Goldstone Complex	California (USA)
Engelhardt Obs.	Russia	Gornergrat North and South Obs.	Switzerland
Ensenada	Mexico	Göttingen	Germany
Erlangen-Nürnberg Univ.	Germany	Göttingen Univ.	Germany
Erwin W. Fick Obs.	Iowa (USA)	Göttingen Univ. Obs.	Germany
Eschweiler (see Stockert Radio Obs.)	Germany	Granada	Spain
Estonian Academy of Sciences	Estonia	Grant O. Gale Obs.	Iowa (USA)
European Incoherent Scatter Facility (EISCAT)	Finland	Graz	Austria
European Incoherent Scatter Facility (EISCAT)	Norway	Graz Obs., Univ. of	Austria
European Incoherent Scatter Facility (EISCAT)	Sweden	Graz, Univ. of	Austria
European Southern Obs.	Chile	Graz, Univ. of (see Kanzelhöhe Solar Obs.)	Austria
Evanston	Illinois (USA)	Graz, Univ. of (see Lustbühl Obs.)	Austria
		Green Bank	West Virginia (USA)
Fan Mountain Station	Virginia (USA)	Greenbelt	Maryland (USA)
		Greensboro	North Carolina (USA)

Name	Location	Name	Location
Greenville	Delaware (USA)	Inst. for Radio Astronomy, Max Planck	Germany
Grenoble	France	Inst. for Research in Ast., Monterey (MIRA)	California (USA)
Grenoble Obs.	France	Inst. for Solar Physics, Kiepenheuer	Germany
Grenoble Univ.	France	Inst. for Solar-Terrestrial Physics, Central	Germany
Griffith Obs.	California (USA)	Inst. of Astrophysics	Belgium
Grinnell	Iowa (USA)	Inst. of Astrophysics	Tadzhikistan
Grinnell College	Iowa (USA)	Inst. of Astrophysics, Indian	India
GSFC Optical Test Site	Maryland (USA)	Inst. of Astrophysics, National	Mexico
Guadalajara	Spain	Inst. of Fundamental Research, Tata	India
Guillermo Haro Astrophysical Obs.	Mexico	Inst. of Geodesy and Geophysics	China (PRC)
Gurushikhar Infrared Obs.	India	Inst. of Geodesy Obs.	Germany
Gyula Station	Hungary	Inst. of Mining and Technology, New Mexico	New Mexico (USA)
		Inst. of Radio Astronomy	Ukraine
Hailsham	United Kingdom	Inst. of Science and Technology	Argentina
Hale Solar Laboratory	California (USA)	Inst. of Technology, Bandung	Indonesia
Haleakala (see C.E.K. Mees Solar Obs.)	Hawaii (USA)	Inst. of Technology, California	California (USA)
Haleakala (see LURE Obs.)	Hawaii (USA)	Inst. of Technology, California	Hawaii (USA)
Hamburg	Germany	Inst. of Technology, Massachusetts (MIT)	Arizona (USA)
Hamburg Obs.	Germany	Inst. of Technology, Massachusetts (MIT)	Massachusetts (USA)
Hamburg, Univ. of	Germany	Inst. of Technology, Swiss Federal	Switzerland
Hannover	Germany	Inst. of the Canaries, Astrophysical (IAC)	Spain
Hannover Univ.	Germany	International Latitude Obs.	Italy
Hanover	New Hampshire (USA)	Iowa City	Iowa (USA)
Hard Labor Creek Obs.	Georgia (USA)	Iowa Obs., Univ. of	Iowa (USA)
Haro Astrophysical Obs., Guillermo	Mexico	Iowa State Univ.	Iowa (USA)
Hartebeeshoek Radio Obs.	South Africa	Iowa, Univ. of	Iowa (USA)
Hartebeespoort (see Leiden Obs. Southern Station)	South Africa	Irkutsk	Russia
Hartung-Boothroyd Obs.	New York (USA)	Irkutsk Obs.	Russia
Harvard	Massachusetts (USA)	Irkutsk State Univ.	Russia
Harvard College Obs.	Massachusetts (USA)	Istanbul	Turkey
Harvard-Smithsonian Center for Astrophysics	Arizona (USA)	Istanbul Univ.	Turkey
Harvard-Smithsonian Center for Astrophysics	Massachusetts (USA)	Istanbul Univ. Obs.	Turkey
Harvard-Smithsonian Center for Astrophysics	Texas (USA)	Itajubá	Brazil
Hat Creek Radio Obs.	California (USA)	Itapetinga Radio Obs.	Brazil
Haute-Provence, Obs. of	France	Ithaca	New York (USA)
Haverford	Pennsylvania (USA)	Izaña (see Teide Obs.)	Spain
Haverford College	Pennsylvania (USA)		
Hawaii, Univ. of	Hawaii (USA)	Jagellonian Univ.	Poland
Haystack Obs.	Massachusetts (USA)	Jagellonian Univ. Obs.	Poland
Heidelberg	Germany	Jagellonian Univ. Obs. Fort Skala Station	Poland
Heliophysical Obs.	Hungary	Japal-Rangapur Obs.	India
Heliophysical Obs. Gyula Station	Hungary	Javan Station	Sweden
Helsinki	Finland	Jelm Mountain (see Wyoming Infrared Obs.)	Wyoming (USA)
Helsinki Obs., Univ. of	Finland	Jena	Germany
Helsinki, Univ. of	Finland	Jet Propulsion Laboratory (JPL)	Spain
Helsinki Univ. of Technology	Finland	Jodrell Bank	United Kingdom
Helsinki Univ. of Technology Metsähovi Station	Finland	Joint Astronomy Centre	Hawaii (USA)
Helwân	Egypt	Joint Obs. for Cometary Research	New Mexico (USA)
Helwân Obs.	Egypt	Joseph Fourier Univ.	France
Herstmonceux	United Kingdom	Jungfrauoch (see High Alpine Obs.)	Switzerland
Hida Obs.	Japan	Junggak-li	Korea (ROK)
High Alpine Obs.	Switzerland		
Hilo	Hawaii (USA)	Kagoshima Space Center	Japan
Hiraiso Solar Terrestrial Research Center	Japan	Kaliningrad	Russia
Hobart	Australia	Kaliningrad State Univ.	Russia
Hoeven	Netherlands	Kaliningrad Univ. Obs.	Russia
Hoher List Obs.	Germany	Kamiku Isshiki (see Fujigane Station)	Japan
Holmdel	New Jersey (USA)	Kamitakara	Japan
Honolulu	Hawaii (USA)	Kamogata-cho	Japan
Hopkins Obs.	Massachusetts (USA)	Kamuela	Hawaii (USA)
Hoskinstown	Australia	Kandilli Obs.	Turkey
Humain Radio Station	Belgium	Kansas, Univ. of	Kansas (USA)
Hungarian Academy of Sciences	Hungary	Kanzelhöhe Solar Obs.	Austria
Hvar	Croatia	Kapteyn Obs.	Netherlands
Hvar Obs.	Croatia	Karl Franzens Univ.	Austria
Hyderabad	India	Karl Schwarzschild Obs.	Germany
Hydrographic Department, Japan	Japan	Kashima	Japan
		Kashima Space Communications Center	Japan
I.I. Mechnikov Univ.	Ukraine	Kavalur	India
Incline Village	Nevada (USA)	Kazan	Russia
Incoherent Scatter Facility	Greenland	Kazan State Univ.	Russia
Indian Inst. of Astrophysics	India	Kazan Univ. Obs.	Russia
Indiana Univ.	Indiana (USA)	Keck Obs., W.M.	Hawaii (USA)
Inst. for Astrophysics, Central	Germany	Kemps Creek (see Fleurs Radio Obs.)	Australia
Inst. for Earth Physics, Central	Germany	Kenneth Mees Obs., C.E.	New York (USA)

Name	Location	Name	Location
Kharkov	Ukraine	Leiden Obs. Southern Station	South Africa
Kharkov Univ. Obs.	Ukraine	Lembang	Indonesia
Kharkov Univ.	Ukraine	Leuschner Obs.	California (USA)
Kiepenheuer Inst. for Solar Physics	Germany	Lexington	Massachusetts (USA)
Kiev	Ukraine	L. Figl Astrophysical Obs.	Austria
Kiev State Univ.	Ukraine	Lick Obs.	California (USA)
Kiev Univ. Obs.	Ukraine	Liège	Belgium
Kingston	Australia	Liège Univ.	Belgium
Kirkkonummi (see Metsähovi Obs.)	Finland	Lincoln	Nebraska (USA)
Kirkkonummi (see Metsähovi Radio Station)	Finland	Link Obs., Goethe	Indiana (USA)
Kiruna Station	Sweden	Lintong	China (PRC)
Kiruna	Sweden	Lisbon	Portugal
Kislovodsk	Russia	Lisbon Obs.	Portugal
Kislovodsk Solar Station	Russia	Llano del Hato Obs.	Venezuela
Kiso Obs.	Japan	Lohrmann Obs.	Germany
Kitab	Uzbekistan	Loiano (see Bologna Univ. Obs.)	Italy
Kitt Peak (see McGraw Hill Obs.)	Arizona (USA)	Lomnický štít Coronal Obs.	Slovakia
Kitt Peak (see National Radio Obs.)	Arizona (USA)	London	Canada
Kitt Peak National Obs.	Arizona (USA)	London	United Kingdom
Kitt Peak Station-Steward Obs.	Arizona (USA)	London Obs., Univ. of	United Kingdom
Kitt Peak Station-Warner and Swasey Obs.	Arizona (USA)	London, Univ. College	United Kingdom
Kodaikanal	India	Los Angeles	California (USA)
Kodaikanal Solar Obs.	India	Los Molinos Obs.	Uruguay
Königstuhl	Germany	Louis Pasteur Univ.	France
Konkoly Obs.	Hungary	Louisville, Univ. of	Kentucky (USA)
Konkoly Obs. Piszkestető Station	Hungary	Lowell Obs.	Arizona (USA)
Korea Obs.	Korea (ROK)	Lowell Obs. Anderson Mesa Station	Arizona (USA)
Kornik	Poland	Lund	Sweden
Kottamia Obs.	Egypt	Lund Obs.	Sweden
Krugerdsdorp	South Africa	Lund Obs. Javan Station	Sweden
Kryonerion Obs.	Greece	Lund Univ.	Sweden
Kuffner Obs.	Austria	LURE Obs.	Hawaii (USA)
Kula	Hawaii (USA)	Lustbuhl Obs.	Austria
Kunming	China (PRC)	Lvov	Ukraine
Kutztown	Pennsylvania (USA)	Lvov State Univ.	Ukraine
Kutztown Univ.	Pennsylvania (USA)	Lvov Univ. Obs.	Ukraine
Kutztown Univ. Obs.	Pennsylvania (USA)	Lyon Univ.	France
Kvistaberg Obs.	Sweden	Lyon Univ. Obs.	France
Kwasan Obs.	Japan		
Kylmäla	Finland	Macclesfield	United Kingdom
Kyoto	Japan	Mackenzie Univ.	Brazil
Kyoto Univ.	Japan	Maclean Obs.	Nevada (USA)
Kyoto Univ. Astronomy Department Obs.	Japan	Madison	Wisconsin (USA)
Kyoto Univ. Physics Department Obs.	Japan	Madrid	Spain
Kyungpook	Korea (ROK)	Main Obs.	Ukraine
		Maipu	Chile
Laboratory for Astrophysics, National	Brazil	Maipu Radio Obs.	Chile
Ladd Obs.	Rhode Island (USA)	Malvern (see Flower and Cook Obs.)	Pennsylvania (USA)
Lafayette (see Leuschner Obs.)	California (USA)	Manastash Ridge Obs.	Washington (USA)
Lake Tekapo	New Zealand	Manchester	United Kingdom
Lake Traverse	Canada	Manchester, Univ. of	United Kingdom
La Laguna	Spain	Manila	Philippine Islands
La Mariquita Mtn. (see Guillermo Haro Aph. Obs.)	Mexico	Manila Obs.	Philippine Islands
Lane Cove	Australia	Manora Peak	India
La Palma	Spain	Manuel de Barros Obs., Prof.	Portugal
La Plata	Argentina	Manuel Foster Astrophysical Obs.	Chile
La Plata, National Univ. of	Argentina	Marche	Belgium
La Plata Obs.	Argentina	Maria Mitchell Obs.	Massachusetts (USA)
Laramie	Wyoming (USA)	Marine-on-St. Croix (see O'Brien Obs.)	Minnesota (USA)
Las Campanas Obs.	Chile	Maryland Obs., Univ. of	Maryland (USA)
Las Cruces	New Mexico (USA)	Maryland Point Obs.	Maryland (USA)
La Serena	Chile	Maryland, Univ. of	Maryland (USA)
La Silla (see European Southern Obs.)	Chile	Massachusetts Inst. of Technology (MIT)	Arizona (USA)
Latitude Obs.	Poland	Massachusetts Inst. of Technology (MIT)	Massachusetts (USA)
Latvian Academy of Sciences	Latvia	Massachusetts, Univ. of	Massachusetts (USA)
Latvian State Univ.	Latvia	Mauna Kea (see Caltech Submillimeter Obs.)	Hawaii (USA)
Latvian State Univ. Obs.	Latvia	Mauna Kea (see Canada-France-Hawaii Tel. Corp.)	Hawaii (USA)
Lausanne Obs., Univ. of	Switzerland	Mauna Kea (see Joint Astronomy Centre)	Hawaii (USA)
Lausanne, Univ. of	Switzerland	Mauna Kea (see W.M. Keck Obs.)	Hawaii (USA)
Lawrence	Kansas (USA)	Mauna Kea Obs.	Hawaii (USA)
Leander McCormick Obs.	Virginia (USA)	Max Planck Inst. for Radio Astronomy	Germany
Leander McCormick Obs. Fan Mountain Station	Virginia (USA)	Mazelspoort (see Boyden Obs.)	South Africa
Leiden	Netherlands	McCormick Obs. Fan Mountain Station, Leander	Virginia (USA)
Leiden National Univ.	Netherlands	McCormick Obs., Leander	Virginia (USA)
Leiden Obs.	Netherlands	McDonald Obs.	Texas (USA)

Name	Location	Name	Location
McGraw-Hill Obs.	Arizona (USA)	Mount Graham (see Submillimeter Tel. Obs.)	Arizona (USA)
Mead (see Behlen Obs.)	Nebraska (USA)	Mount Graham (see Vatican Obs. Research Group)	Arizona (USA)
Mechnikov Univ., I.I.	Ukraine	Mount Hamilton	California (USA)
Medicina	Italy	Mount Hopkins (see Fred L. Whipple/MMT Obs.)	Arizona (USA)
Medicina Radio Obs.	Italy	Mount John Univ.	New Zealand
Mees Obs., C.E. Kenneth	New York (USA)	Mount John Univ. Obs.	New Zealand
Mees Solar Obs., C.E.K.	Hawaii (USA)	Mount Kanobili	Georgia
Melton Memorial Obs.	South Carolina (USA)	Mount Killini (see Kryonerion Obs.)	Greece
Menlo Park	California (USA)	Mount Laguna Obs.	California (USA)
Menlo Park	Greenland	Mount Lemmon Infrared Obs.	Arizona (USA)
Merate	Italy	Mount Lemmon Station	Arizona (USA)
Mérida	Venezuela	Mount Locke (see McDonald Obs.)	Texas (USA)
Methodist College, Central	Missouri (USA)	Mount Locke (see Millimeter Wave Obs.)	Texas (USA)
Metsähovi Obs.	Finland	Mount Norikura	Japan
Metsähovi Radio Station	Finland	Mount Pleasant	Michigan (USA)
Meudon	France	Mount Pleasant Radio Obs.	Australia
Meudon Obs.	France	Mount Stromlo Obs.	Australia
Mexico City	Mexico	Mount Suhora Obs.	Poland
Mexico, National Univ. of	Mexico	Mount Wilson Obs.	California (USA)
Meyer-Womble Obs.	Colorado (USA)	Mount Zin (see Florence and George Wise Obs.)	Israel
Michigan Radio Obs., Univ. of	Michigan (USA)	Mountain Obs.	Kazakhstan
Michigan State Univ.	Michigan (USA)	Mullard Radio Obs.	United Kingdom
Michigan State Univ. Obs.	Michigan (USA)	Multiple-Mirror Telescope (MMT) Obs.	Arizona (USA)
Michigan Univ., Central	Michigan (USA)	Munich	Germany
Michigan Univ. Obs., Central	Michigan (USA)	Munich Univ.	Germany
Michigan, Univ. of	Michigan (USA)	Munich Univ. Obs.	Germany
Mickiewicz Univ., A.	Poland		
Middletown	Connecticut (USA)	Nagano	Japan
Milan	Italy	Nagoya	Japan
Mill Hill	United Kingdom	Nagoya Univ.	Japan
Millimeter Radio Astronomy Inst.	France	Nagoya Univ. Fujigane Station	Japan
Millimeter Radio Astronomy Inst.	Spain	Nagoya Univ. Radio Laboratory	Japan
Millimeter Wave Obs.	Texas (USA)	Nagoya Univ. Sugadaira Station	Japan
Mills Obs.	United Kingdom	Nagoya Univ. Toyokawa Station	Japan
Millstone Hill Atmospheric Science Facility	Massachusetts (USA)	Naini Tal	India
Millstone Hill Radar Obs.	Massachusetts (USA)	Nakaminato	Japan
Miaamimaki-mura	Japan	Nançay Radio Station	France
Minas Gerais, Federal Univ. of	Brazil	Nanjing	China (PRC)
Minneapolis	Minnesota (USA)	Nantucket	Massachusetts (USA)
Minnesota, Univ. of	Arizona (USA)	Naples	Italy
Minnesota, Univ. of	Minnesota (USA)	Narrabri	Australia
MIRA Oliver Station	California (USA)	Nassau Obs.	Ohio (USA)
Mitaka	Japan	National Air and Space Administration (NASA)	Maryland (USA)
Mitake	Japan	National Astronomy and Ionosphere Center	Puerto Rico
Mitchell Obs., Maria	Massachusetts (USA)	National Central Univ.	Taiwan (ROC)
Mitpe Ramon (see Florence & George Wise Obs.)	Israel	National Central Univ. Obs.	Taiwan (ROC)
Miyun Station	China (PRC)	National Centre for Radio Astrophysics	India
Mizusawa	Japan	National Geophysical and Ast. Service	Philippine Islands
Mizusawa Astrogeodynamics Obs.	Japan	National Inst. of Astrophysics	Mexico
MMT (Multiple-Mirror Telescope) Obs.	Arizona (USA)	National Laboratory for Astrophysics	Brazil
Molonglo Radio Obs.	Australia	National Obs.	Brazil
Moate Mario (see Rome Obs.)	Italy	National Obs.	Colombia
Monterey	California (USA)	National Obs.	Japan
Monterey Inst. for Research in Ast. (MIRA)	California (USA)	National Obs.	Spain
Montevideo	Uruguay	National Obs.-Ensenada	Mexico
Montevideo Obs.	Uruguay	National Obs., Kitt Peak	Arizona (USA)
Mont Mégantic Obs.	Canada	National Obs. of Athens	Greece
Montreal	Canada	National Obs. of Athens Kryonerion Station	Greece
Montreal, Univ. of	Canada	National Obs. of Athens Pentelici Station	Greece
Montville (see Nassau Obs.)	Ohio (USA)	National Obs. of Cosmic Physics	Argentina
Moore Obs.	Kentucky (USA)	National Obs.-Tonantzintla	Mexico
Moraes Obs., Abrahão de	Brazil	National Radio Obs.	Arizona (USA)
Morehead Obs.	North Carolina (USA)	National Radio Obs.	New Mexico (USA)
Morrison Obs.	Missouri (USA)	National Radio Obs.	West Virginia (USA)
Morro Santana Obs.	Brazil	National Radio Obs., Australian	Australia
Moscow	Russia	National Research Council (NRC)	Canada
Moscow Univ.	Russia	National Solar Obs.	New Mexico (USA)
Mount Abu	India	National Univ., Australian	Australia
Mount Aragatz (see Byurakan Astrophysical Obs.)	Armenia	National Univ., Leiden	Netherlands
Mount Bigelow Station	Arizona (USA)	National Univ. of Colombia	Colombia
Mount Chikurin (see Okayama Astrophysical Obs.)	Japan	National Univ. of Córdoba	Argentina
Mount Cuba Obs.	Delaware (USA)	National Univ. of La Plata	Argentina
Mount Dodaira (see Dodaira Obs.)	Japan	National Univ. of Mexico	Mexico
Mount Ekar Obs.	Italy	National Univ. of San Juan	Argentina
Mount Evans (see Meyer-Womble Obs.)	Colorado (USA)	Naval Obs.	Argentina

Name	Location	Name	Location
Naval Obs.	Spain	Palermo Univ. Obs.	Italy
Naval Obs. Flagstaff Station, U.S.	Arizona (USA)	Palo Alto (see Stanford Center for Radar Ast.)	California (USA)
Naval Obs., U.S.	D.C. (USA)	Palomar Mountain	California (USA)
Naval Research Laboratory (NRL)	D.C. (USA)	Palomar Obs.	California (USA)
Naval Research Laboratory (NRL)	Maryland (USA)	Paranal Obs.	Chile
Naval Research Laboratory (NRL)	West Virginia (USA)	Paris	France
Nebraska Univ. of	Nebraska (USA)	Paris Obs.	France
Neuchâtel	Switzerland	Paris Obs. Meudon Station	France
Neuvy Sur Barangeon	France	Paris Obs. Nançay Station	France
Nevada College, Sierra	Nevada (USA)	Parkes	Australia
New Mexico Inst. of Mining and Technology	New Mexico (USA)	Partizanskoye	Ukraine
New Mexico State Univ.	New Mexico (USA)	Pasadena	California (USA)
New Mexico Univ. Obs. Blue Mesa Station	New Mexico (USA)	Pasadena	Spain
New Mexico Univ. Obs. Tortugas Mtn. Station	New Mexico (USA)	Pasteur Univ., Louis	France
New Mexico, Univ. of	New Mexico (USA)	Pennsylvania State Univ.	Pennsylvania (USA)
New Salem (see Five College Radio Obs.)	Massachusetts (USA)	Pennsylvania, Univ. of	Pennsylvania (USA)
New York	New York (USA)	Pentete Station	Greece
New York	Spain	Penticton	Canada
Nicholas Copernicus Obs.	Czech Republic	Perkins Obs.	Ohio (USA)
Nicolaus Copernicus Univ.	Poland	Perth Obs.	Australia
Nijmegen	Netherlands	Philadelphia	Pennsylvania (USA)
Nikolaev	Ukraine	Physical Research Laboratory	India
Nikolaev Obs.	Ukraine	Pic du Midi Obs.	France
Nizamia Obs.	India	Pico dos Dias Obs.	Brazil
Nobeyama	Japan	Pico Veleta (see Millimeter Radio Ast. Inst.)	Spain
Nobeyama Cosmic Radio Obs.	Japan	Piedade Obs.	Brazil
Nobeyama Solar Radio Obs.	Japan	Pukkiö	Finland
Norikura Solar Obs.	Japan	Pine Bluff Obs.	Wisconsin (USA)
North Carolina, Univ. of	North Carolina (USA)	Pino Torinese	Italy
Northeast Radio Obs. Corporation	Massachusetts (USA)	Piskéštető Station	Hungary
Northern Arizona Univ.	Arizona (USA)	Pittsburgh	Pennsylvania (USA)
Northern Arizona Univ. Obs.	Arizona (USA)	Pittsburgh, Univ. of	Pennsylvania (USA)
North Gomergrat Obs.	Switzerland	Piwnice Obs.	Poland
North Liberty	Iowa (USA)	Plateau de Bure (see Grenoble Obs.)	France
North Liberty Radio Obs.	Iowa (USA)	Plateau de Bure (see Millimeter Radio Ast. Inst.)	France
Northwestern Univ.	Illinois (USA)	Polish Academy of Sciences	Poland
Northwestern Univ.	New Mexico (USA)	Pontifical Catholic Univ.	Chile
NRL Radio Obs.	D.C. (USA)	Porto Alegre	Brazil
NRL Radio Obs.	West Virginia (USA)	Porto Univ.	Portugal
Nuffield Radio Laboratories	United Kingdom	Potsdam	Germany
		Potsdam Astrophysical Obs.	Germany
Oakland	California (USA)	Poznan	Poland
Oak Ridge Obs.	Massachusetts (USA)	Poznan Univ.	Poland
O'Brien Obs.	Minnesota (USA)	Poznan Univ. Obs.	Poland
Obs. of Haute-Provence	France	Prague	Czech Republic
Odessa	Ukraine	Priddis (see Rothney Astrophysical Obs.)	Canada
Odessa Obs.	Ukraine	Princeton	New Jersey (USA)
Ohio State Univ.	Ohio (USA)	Princeton Univ.	New Jersey (USA)
Ohio Wesleyan Univ.	Ohio (USA)	Prof. Manuel de Barros Obs.	Portugal
Okayama Astrophysical Obs.	Japan	Prostejov	Czech Republic
Old Town (see Florida Radio Obs., Univ. of)	Florida (USA)	Prostejov Obs.	Czech Republic
Ole Romer Obs.	Denmark	Providence	Rhode Island (USA)
Oliver Station	California (USA)	Pulkovo	Russia
Ondrejov	Czech Republic	Pulkovo Obs.	Russia
Ondrejov Obs.	Czech Republic	Pulkovo Obs. Kislovodsk Station	Russia
Onsala	Sweden	Purple Mountain Obs.	China (PRC)
Onsala Space Obs.	Sweden		
Ontario, Univ. of Western	Canada	Quezon City	Philippine Islands
Ootacamund	India	Quito	Ecuador
Open Univ. of Brussels	Belgium	Quito Obs.	Ecuador
Optical Test Site	Maryland (USA)		
Orange Free State, Univ. of the	South Africa	Radio Astronomy Center	India
Osmania Univ.	India	Ramfjordbotn	Norway
Ostervold	Denmark	Ramon Maria Aller Obs.	Spain
Ostrowik (see Warsaw Univ. Obs.)	Poland	Rattlesnake Mtn. (see Black Moshannon Obs.)	Pennsylvania (USA)
Ottawa	Canada	Remeis Obs.	Germany
Ottawa River Solar Obs.	Canada	Richmond Hill	Canada
Owens Valley Radio Obs.	California (USA)	Riga	Latvia
		Riga Radio-Astrophysical Obs.	Latvia
Padua	Italy	Rio de Janeiro	Brazil
Padua Obs.	Italy	Rio Grande do Sol, Federal Univ.	Brazil
Padua Univ.	Italy	Ritter Obs.	Ohio (USA)
Pagasa Obs.	Philippine Islands	Riverside (see Iowa Obs., Univ. of)	Iowa (USA)
Palermo	Italy	Riverside (see Maryland Point Obs.)	Maryland (USA)
Palermo Univ.	Italy	Riverview College Obs.	Australia

Name	Location	Name	Location
Robledo	Spain	Simeis	Ukraine
Rochester	New York (USA)	Simon Stevin Obs.	Netherlands
Rochester, Univ. of	New York (USA)	Simosato	Japan
Roden	Netherlands	Simosato Hydrographic Obs.	Japan
Rome	Italy	Sirahama	Japan
Rome Obs.	Italy	Sirahama Hydrographic Obs.	Japan
Rømer Obs., Ole	Denmark	Skalná Pleso Obs.	Slovakia
Roque de los Muchachos Obs.	Spain	Skibota	Norway
Roquetas	Spain	Skibota Obs.	Norway
Rosemary Hill Obs.	Florida (USA)	Slovak Academy of Sciences	Slovakia
Rothney Astrophysical Obs.	Canada	Slovak Technical Univ.	Slovakia
Royal Obs.	Belgium	Slovak Technical Univ. Obs.	Slovakia
Royal Obs. Edinburgh	United Kingdom	Sobaeksan Obs.	Korea (ROK)
Royal Obs. Hurnain Radio Station	Belgium	Socorro	New Mexico (USA)
Russian Academy of Sciences	Russia	Sodankylä	Finland
Rutherford Obs.	New York (USA)	Sodankylä Station	Finland
Rutledge (see Hard Labor Creek Obs.)	Georgia (USA)	Sommers-Bausch Obs.	Colorado (USA)
		Søndre Strømfjord (see Incoherent Scatter Fac.)	Greenland
Sacramento Peak	New Mexico (USA)	Sonneberg	Germany
Sagamore Hill Radio Obs.	Massachusetts (USA)	Sonneberg Obs.	Germany
Saint Andrews	United Kingdom	Sonnenborgh Obs.	Netherlands
Saint Andrews Obs., Univ. of	United Kingdom	South African Obs.	South Africa
Saint Andrews, Univ. of	United Kingdom	South African Obs. Sutherland Station	South Africa
Saint Corona at Schöpl (see L. Figl Aph. Obs.)	Austria	South Canterbury	New Zealand
Saint Genis Laval	France	South Carolina Radio Obs., Univ. of	South Carolina (USA)
Saint Ignatius College	Australia	South Carolina, Univ. of	South Carolina (USA)
Saint Martin d'Hères	France	Southern Station	South Africa
Saint Michel (see Obs. of Haute-Provence)	France	South Gornegrat Obs.	Switzerland
Saint Petersburg	Russia	South Hamilton	Massachusetts (USA)
Saint Petersburg Univ. Obs.	Russia	South Park (see Tiara Obs.)	Colorado (USA)
Saint Vallier-de-Thiery	France	Special Astrophysical Obs.	Russia
Saitama	Japan	Sproul Obs.	Pennsylvania (USA)
Saltsjöbaden	Sweden	SRI Radio Obs.	California (USA)
San Diego	California (USA)	Stanford	California (USA)
San Diego State Univ.	California (USA)	Stanford Center for Radar Astronomy	California (USA)
San Fernando	Spain	Stanford Research Inst. (SRI, Intl.)	California (USA)
San Fernando Obs.	California (USA)	Stanford Research Inst. (SRI, Intl.)	Greenland
San Juan	Argentina	Stanford Univ.	California (USA)
San Juan, National Univ. of	Argentina	Stanford Univ. Radio Astronomy Inst.	California (USA)
San Juan-Yale Universities	Argentina	State Obs.	Germany
San Miguel	Argentina	Stavropolskij Kraj	Russia
San Pedro Martir (see National Obs.-Ensenada)	Mexico	Stellar Station	Italy
Santa Cruz	Spain	Stephanion	Greece
Santana Obs., Morro	Brazil	Stephanion Obs.	Greece
Santiago	Chile	Sternberg State Astronomical Inst.	Russia
Santiago de Compostela	Spain	Stevin Obs., Simon	Netherlands
Santiago de Compostela Univ.	Spain	Steward Obs.	Arizona (USA)
San Vittore Obs.	Italy	Steward Obs. Catalina Station	Arizona (USA)
São Paulo	Brazil	Steward Obs. Kitt Peak Station	Arizona (USA)
São Paulo, Univ. of	Brazil	Steward Obs. Mount Bigelow Station	Arizona (USA)
Satellite Laser Ranger Group	United Kingdom	Steward Obs. Mount Lemmon Station	Arizona (USA)
Sauverny	Switzerland	Steward Obs. Tumamoc Hill Station	Arizona (USA)
Saxapahaw (see Three College Obs.)	North Carolina (USA)	Stockbridge	United Kingdom
Sayan Mountains Radiophysical Obs.	Russia	Stockert Radio Obs.	Germany
Schauinsland Obs.	Germany	Stockholm Obs.	Sweden
Schiller Univ., Friedrich	Germany	Stockholm Univ.	Sweden
Schiller Univ. Obs., Friedrich	Germany	Strasbourg	France
Schöneberg	Germany	Strasbourg Obs.	France
Schwarzschild Obs., Karl	Germany	Strawbridge Obs.	Pennsylvania (USA)
Scott College, Agnes	Georgia (USA)	Struve Astrophysical Obs., Wilhelm	Estonia
Seattle	Washington (USA)	Stuttgart Obs.	Germany
Sendai	Japan	Subaru Telescope	Hawaii (USA)
Sendai Obs.	Japan	Submillimeter Obs., Caltech	Hawaii (USA)
Serra la Nave (see Stellar Station)	Italy	Submillimeter Telescope Obs.	Arizona (USA)
Shaanxi Obs.	China (PRC)	Sugadaira Station	Japan
Shahe Station	China (PRC)	Sugar Grove	West Virginia (USA)
Shanghai	China (PRC)	Sunspot	New Mexico (USA)
Shanghai Obs. Sheshan Station	China (PRC)	Sutherland Station	South Africa
Shanghai Obs. Xujiahui Station	China (PRC)	Swabian Obs.	Germany
Shattuck Obs.	New Hampshire (USA)	Swarthmore	Pennsylvania (USA)
Sheshan	China (PRC)	Swarthmore College	Pennsylvania (USA)
Sheshan Station	China (PRC)	Swiss Federal Inst. of Technology	Switzerland
Siding Spring Mtn. (see Anglo-Australian Obs.)	Australia	Swiss Federal Obs.	Switzerland
Siding Spring Obs.	Australia	Sydney	Australia
Sierra Nevada College	Nevada (USA)	Sydney, Univ. of	Australia

Name	Location	Name	Location
Sylmar	California (USA)	Uccle (see Royal Obs.)	Belgium
Syracuse	New York (USA)	Uchinoura (see Kagoshima Space Center)	Japan
Syracuse Univ.	New York (USA)	Udhagamandalam	India
Syracuse Univ. Obs.	New York (USA)	Ukrainian Academy of Sciences	Ukraine
Table Mountain Obs.	California (USA)	Uluk-Bek Latitude Station	Uzbekistan
Tadzhik Academy of Sciences	Tadzhikistan	University Park	Pennsylvania (USA)
Taejeon	Korea (ROK)	Uppsala Univ.	Sweden
Tahtitorninmäki	Finland	Urania Obs.	Austria
Taipei	Taiwan (ROC)	Urania Obs.	Hungary
Taipei Obs.	Taiwan (ROC)	Urumqi	China (PRC)
Tamil Nadu	India	Urumqi Station	China (PRC)
Tartu	Estonia	U.S. Air Force Academy	Colorado (USA)
Tashkent	Uzbekistan	U.S. Air Force Academy Obs.	Colorado (USA)
Tashkent Obs.	Uzbekistan	U.S. Naval Obs.	D.C. (USA)
Tasmania, Univ. of	Australia	U.S. Naval Obs. Flagstaff Station	Arizona (USA)
Tata Inst. of Fundamental Research	India	Utrecht	Netherlands
Tata Inst. Radio Astronomy Center	India	Uttar Pradesh State Obs.	India
Tatranská Lomnica	Slovakia	Vainu Bappu Obs.	India
Tautenburg	Germany	Valasské Mezirčí	Czech Republic
Teide Obs.	Spain	Valasské Mezirčí Obs.	Czech Republic
Tel Aviv	Israel	Valinhos (see Abrahão de Moraes Obs.)	Brazil
Tel Aviv Univ.	Israel	Valongo Obs.	Brazil
Tenerife	Spain	Vanderbilt Univ.	Tennessee (USA)
Teramo	Italy	Van Vleck Obs.	Connecticut (USA)
Texas, Univ. of	Texas (USA)	Vatican Obs.	Vatican City State
Thessaloniki	Greece	Vatican Obs. Research Group	Arizona (USA)
Thessaloniki Obs., Univ. of	Greece	V.G. Fesenkov Astrophysical Inst.	Kazakhstan
Thessaloniki, Univ. of	Greece	Victoria	Canada
Thompson Obs.	Wisconsin (USA)	Victoria, Univ. of	Canada
Three College Obs.	North Carolina (USA)	Vienna	Austria
Tianjing Latitude Station	China (PRC)	Vienna Univ.	Austria
Tiara Obs.	Colorado (USA)	Vienna Univ. Obs.	Austria
Tidbinbilla	Australia	Vila Nova de Gaia	Portugal
Tohoku Univ.	Japan	Villa Elisa	Argentina
Tohoku Univ. Obs.	Japan	Villanova	Pennsylvania (USA)
Tokyo	Japan	Villanova Univ.	Pennsylvania (USA)
Tokyo Hydrographic Obs.	Japan	Villanova Univ. Obs.	Pennsylvania (USA)
Tokyo, Univ. of	Japan	Vilnius	Lithuania
Toledo	Ohio (USA)	Vilnius Obs.	Lithuania
Toledo, Univ. of	Ohio (USA)	Vilnius Univ.	Lithuania
Tølløse	Denmark	Virginia, Univ. of	Virginia (USA)
Tololo Inter-American Obs., Cerro	Chile	Wallace Jr. Astrophysical Obs., George R.	Massachusetts (USA)
Tombaugh Obs., Clyde W.	Kansas (USA)	Warner and Swasey Obs.	Ohio (USA)
Tomsk	Russia	Warner and Swasey Obs. Kitt Peak Station	Arizona (USA)
Tomsk State Univ.	Russia	Warsaw	Poland
Tomsk Univ. Obs.	Russia	Warsaw Univ.	Poland
Tonantzintla	Mexico	Warsaw Univ. Obs.	Poland
Topeka	Kansas (USA)	Washburn Obs.	Wisconsin (USA)
Toronto, Univ. of	Canada	Washburn Univ.	Kansas (USA)
Tortugas Mountain Station	New Mexico (USA)	Washington	D.C. (USA)
Torun	Poland	Washington	Maryland (USA)
Toulouse	France	Washington, Univ. of	Washington (USA)
Toulouse Univ.	France	Wasosz (see Bialkow Station)	Poland
Toulouse Univ. Obs.	France	Wellesley	Massachusetts (USA)
Toyokawa	Japan	Wellesley College	Massachusetts (USA)
Toyokawa Obs.	Japan	Wellington	New Zealand
Toyokawa Station	Japan	Wendelstein Solar Obs.	Germany
Treffen	Austria	Wesleyan Univ.	Connecticut (USA)
Tremsdorf	Germany	Westerbork Radio Obs.	Netherlands
Tremsdorf Radio Obs.	Germany	Western Connecticut State Univ.	Connecticut (USA)
Trieste	Italy	Western Connecticut State Univ. Obs.	Connecticut (USA)
Trieste Obs.	Italy	Western Ontario Obs., Univ. of	Canada
Tromsø Station	Norway	Westford	Massachusetts (USA)
Tromsø, Univ. of	Norway	Westford (see George R. Wallace Jr. Aph. Obs.)	Massachusetts (USA)
Tübingen	Germany	Westford (see Millstone Hill Radar Obs.)	Massachusetts (USA)
Tübingen Univ.	Germany	Westford Antenna Facility	Massachusetts (USA)
Tübingen Univ. Obs.	Germany	Weston Creek	Australia
Tucson	Arizona (USA)	Whaam-dong	Korea (ROK)
Tumamoc Hill Station	Arizona (USA)	Whipple Obs., Fred L.	Arizona (USA)
Tuorla	Finland	Whitin Obs.	Massachusetts (USA)
Tuorla Obs.	Finland	Wilhelm Foerster Obs.	Germany
Turin Obs.	Italy	Wilhelm Struve Astrophysical Obs.	Estonia
Turku, Univ. of	Finland		
Tuscaloosa	Alabama (USA)		

Name	Location	Name	Location
Wilhelms Univ., Friedrich	Germany	Zagreb	Croatia
Williams Bay	Wisconsin (USA)	Zagreb Univ.	Croatia
Williams College	Massachusetts (USA)	Zelenchukskaya	Russia
Williamstown	Massachusetts (USA)	Zenas Crane Obs.	Kansas (USA)
Wisconsin, Univ. of	Wisconsin (USA)	Zermatt (see Gornergrat North and South Obs.)	Switzerland
Wise Obs., The Florence and George	Israel	Zhdanov State Univ., A.A.	Russia
W.M. Keck Obs.	Hawaii (USA)	Zi-Ka-We	China (PRC)
Wrightwood	California (USA)	Zimmerwald Obs.	Switzerland
Wroclaw	Poland	Zô-Sè	China (PRC)
Wroclaw Univ.	Poland	Zürich	Switzerland
Wroclaw Univ. Bralkow Station	Poland	Zwiggelte	Netherlands
Wroclaw Univ. Obs.	Poland		
Wuchang	China (PRC)		
Wuchang Time Obs.	China (PRC)		
Wuhan (see Wuchang Time Obs.)	China (PRC)		
Wyoming Infrared Obs.	Wyoming (USA)		
Wyoming, Univ. of	Wyoming (USA)		
Xian	China (PRC)		
Xinglong Station	China (PRC)		
Xujiahui Station	China (PRC)		
Yale-San Juan Universities	Argentina		
Yebes Astronomical Center	Spain		
Yerkes Obs.	Wisconsin (USA)		
Yunnan Obs.	China (PRC)		

